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ASD-TDR-63-145
Volume II

NB-66B HIGH ALTITUDE GUST SURVEY:
Power Spectra

TECHNICAL DOCUMENTARY REPORT NO. ASD-TDR-63-145, Vol II

JUNE 1963

AF FLIGHT DYNAMIC LABORATORY
AERONAUTICAL SYSTEMS DIVISION
AIR FORCE SYSTEMS COMMAND
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

19990721027

Project No. 1447

(Prepared under Contract AF 33(616)-7647
By Douglas Aircraft Company, Inc., Aircraft Division,
Long Beach, California.
Authors: J. A. Strom and T. G. Weathermon)

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Aeronautical Systems Division, AF Flight Dynamics Laboratory, Wright-Patterson Air Force Base, Ohio.
Rpt Nr ASD-TDR-63-145, Vol II. NB-66B HIGH ALTITUDE GUST SURVEY: Power Spectra, Final Report, June 63, 443pages.

Unclassified Report

Volume II contains the power spectra plots for vertical, lateral and forward gust velocities corrected for airplane motion, followed by the power spectra plots of uncorrected vertical and uncorrected lateral gust velocities. The data presented were obtained from 109 high altitude storm penetrations in which the length of runs varied up to 240 seconds.

(over)

UNCLASSIFIED

1. Meteorological Data
2. Wind
3. Turbulence
4. Thunderstorms

I. AFSC Project 1447
II. AF 33(616)-7647
III. Douglas Aircraft Co, Aircraft Division, Long Beach, Calif.
IV. J. A. Strom
T.G. Weathermon
V. Aval fr OTS
VI. In ASTIA collection

UNCLASSIFIED

The data were sampled 25 times per second and the autocorrelation function was computed for 125 phase shifts.

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FOREWORD

This report was prepared by the Douglas Aircraft Company, Inc., Aircraft Division, Long Beach, California, under USAF Contract Nr. AF 33(616)-7647, Project Nr. 1447, "High Level Turbulence." This Project is a part of the Air Force Systems Command's Applied Research Program 750A, "Mechanics of Flight." The work was administered under the Flight Dynamics Laboratory, Aeronautical Systems Division with Mr. Denver W. Mullins and Mr. Lawrence R. Phillips acting as Project Engineers.

The data gathering was a combined effort of the Aeronautical Systems Division's Directorate of Flight Test and the Douglas Aircraft Company, Inc. The operation and maintenance of the test aircraft was the responsibility of the Directorate of Flight Test under Capt. C. D. Smith, Jr., the Project Pilot. The aircraft instrumentation, data recording and data reduction was the responsibility of Douglas Aircraft Company, Inc., Flight Test Division under Mr. J. C. Londelius. Douglas Project Engineers were Mr. T. C. Naughton and Mr. J. A. Strom.

Data defining gust intensities and frequencies from 109 high altitude storm penetrations flown during the Rough Rider II and III phases of the 1961 National Severe Storms Project are included in this report.

This is the final report under Contract AF 33(616)-7647. The Contractor's report number is LB-31236.

ABSTRACT

Volume II contains the power spectra plots for vertical, lateral and forward gust velocities corrected for airplane motion, followed by the power spectra plots of uncorrected vertical and uncorrected lateral gust velocities. The data presented were obtained from 109 high altitude storm penetrations in which the length of runs varied up to 240 seconds. The data were sampled 25 times per second and the autocorrelation function was computed for 125 phase shifts.

PUBLICATION REVIEW

This report has been reviewed and approved.

FOR THE COMMANDER

RICHARD F. HOENER
Chief, Structures Branch
Flight Dynamics Laboratory

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[redacted] 15	1	7
[redacted] 15	2	8
[redacted] 15	3	9
[redacted] 15	4	10
[redacted] 19	4	11
[redacted] 19	5	12
[redacted] 19	6	13
[redacted] 19	7	14
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[redacted] 27	9	72
[redacted] 27	10	74
[redacted] 27	11	78
[redacted] 27	12	82
[redacted] 27	13	86
[redacted] 27	14	90
[redacted] 27	15	94
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EG 31	3	248
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EG 31	5	258
EG 31	6	263
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EG 32	2	272
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NO 37	7	416
NO 37	8	421
NO 37	9	426
NO 37	10	431

LIST OF SYMBOLS

ΔT	Time difference between each point in the time series, sec.
M	Number of phase shifts for which the autocorrelation function was computed.
N	Number of data samples in the time series from which the spectra was computed.

LIST OF VOLUMES

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Section:

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2. One-dimensional frequency distribution of the peaks for vertical, lateral and forward gust velocities.
3. Composite power spectra plots of vertical, lateral and forward gust velocities.
4. Power spectra comparison plots of vertical, lateral and forward gust velocities.
5. Pilots' flight reports.
6. Cross-spectra plots, autocorrelations, time series plots and two-dimensional frequency distribution of the peaks from four severe penetrations.

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I. General description of the A076 statistical analysis program.

II. Explication of the IBM printout format.

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VOLUME III

Time series -- plots of gust velocities, airspeed, altitude, temperature and normal acceleration.

BASIC DATA -- IBM PRINTOUT

Book	Flight No.	Penetration No.
1	MG 14	2, 3, 4, 5, 6
	MG 15	1, 2, 3, 4
	MG 19	4, 5, 6, 7
2	MG 22	1, 2, 4, 5, 6, 7, 9
3	MG 22	10
	MG 27	1, 2, 3, 5, 6, 7, 8, 9, 10, 11
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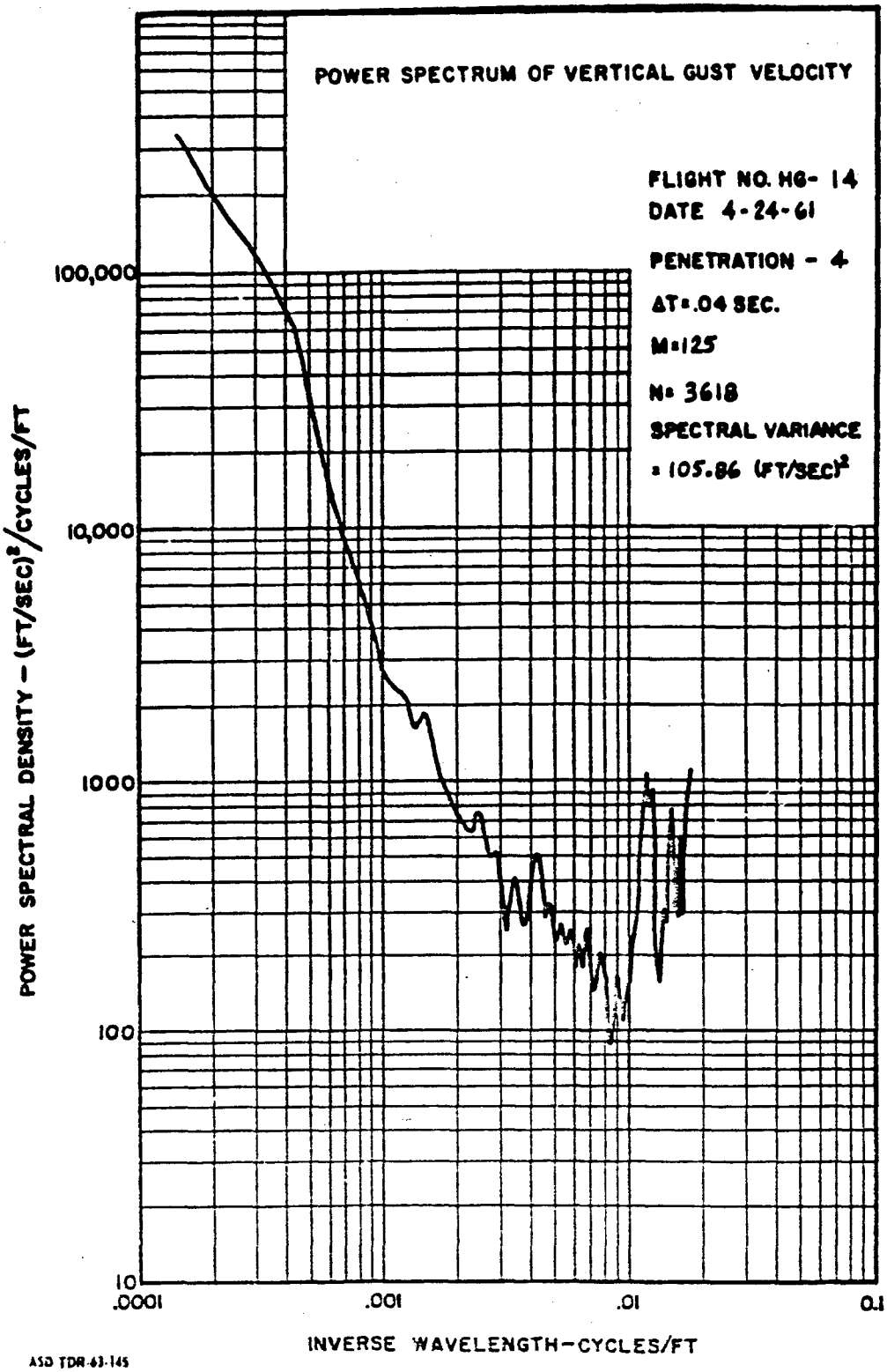
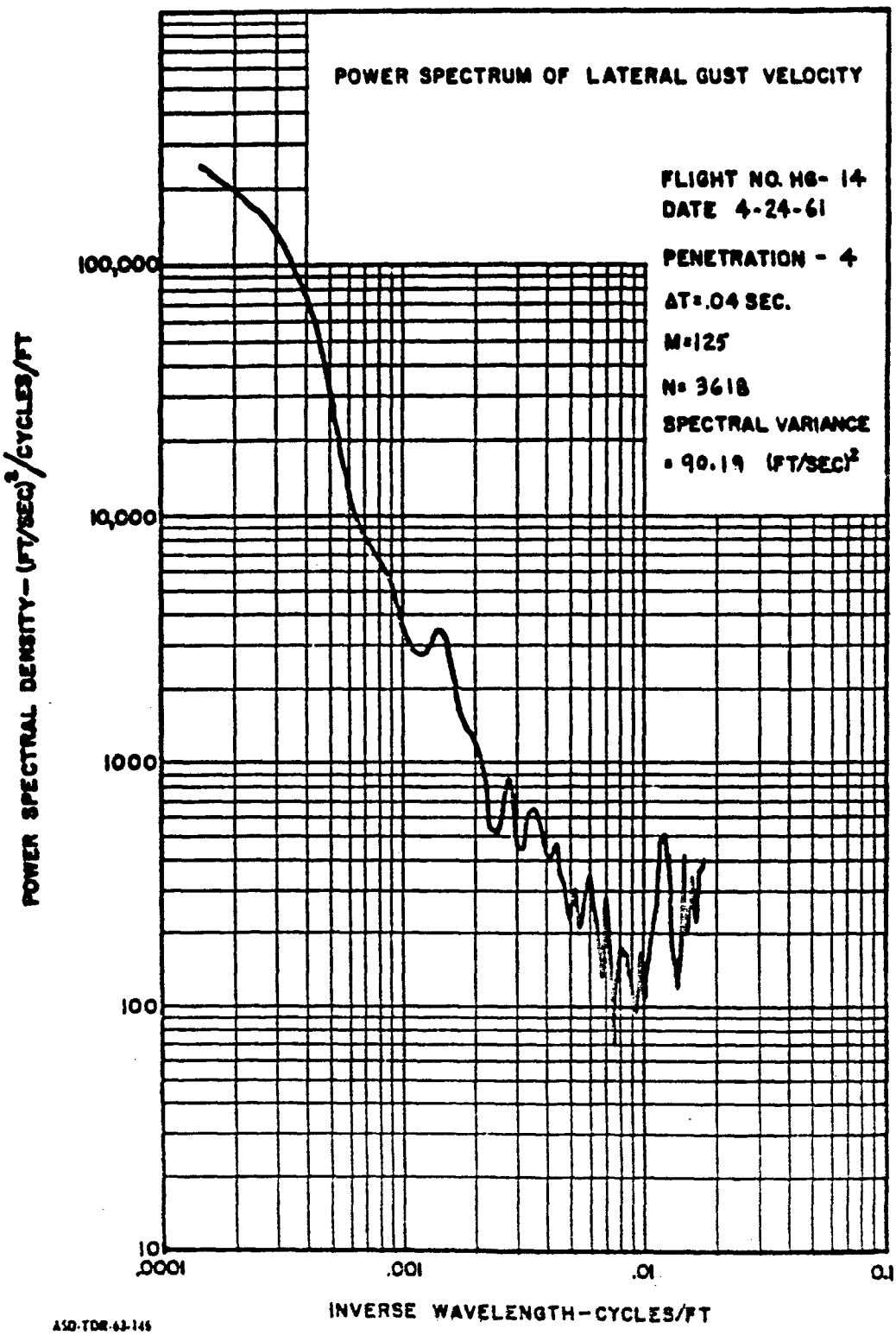
7	MG 29	8, 9, 10, 11, 12, 13, 14, 15, 16
8	MG 29	17, 18, 20
	MG 31	1, 2, 3, 4
9	MG 31	5, 6
	MG 32	1, 2, 3, 4
10	MG 32	5, 6, 7, 8, 9, 10
11	MG 32	11, 12, 13, 14, 15
12	MG 33	1, 2, 4, 5, 6
13	MG 35	6, 7, 9, 10, 11
	MG 37	1, 2, 3
14	MG 37	4, 6, 7, 8, 9, 10


POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 14
DATE 4-24-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 3618
SPECTRAL VARIANCE
= 105.86 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT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FLIGHT NO. HS- 14
DATE 4-24-61
PENETRATION - 4
ΔT=.04 SEC.
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N= 3618
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= 90.19 (FT/SEC)²
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10,000
1000
100
10
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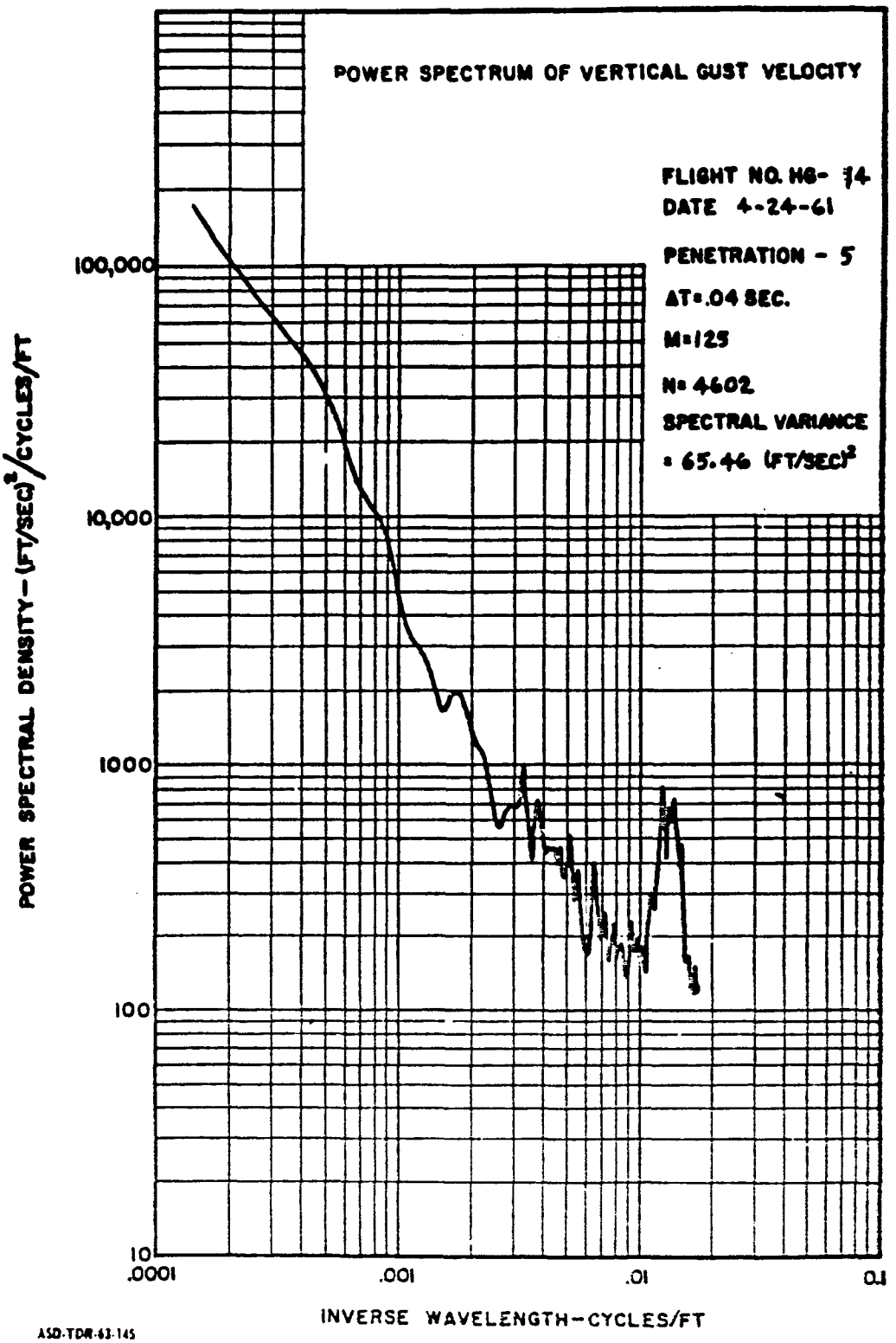
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT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FLIGHT NO. H6- 14
DATE 4-24-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N=4602
SPECTRAL VARIANCE
= 65.46 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
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10,000
1000
100
10
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.001
.01
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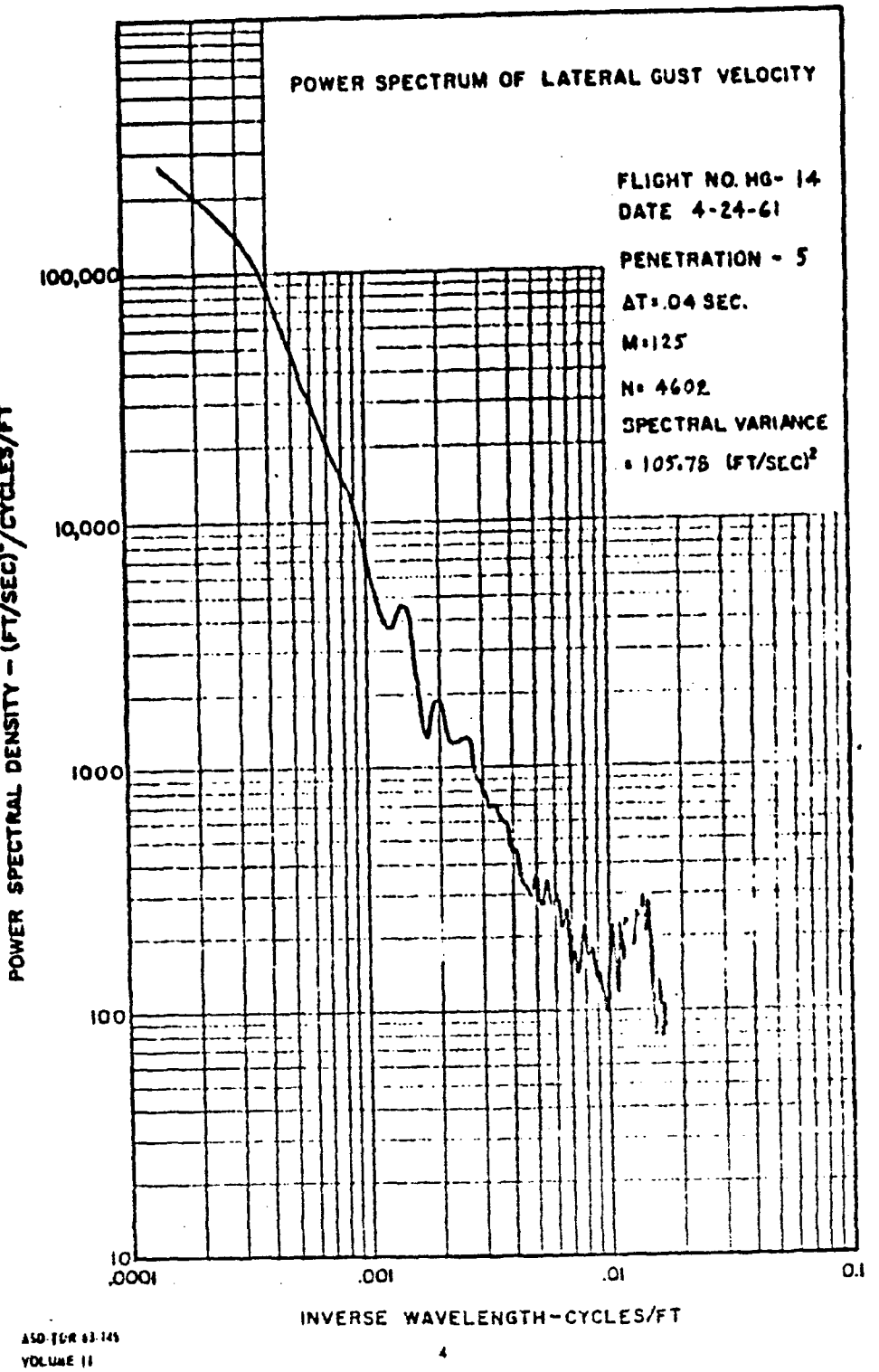
INVERSE WAVELENGTH - CYCLES/FT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FLIGHT NO. HG- 14
DATE 4-24-61
PENETRATION - 5
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N= 4602
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10,000
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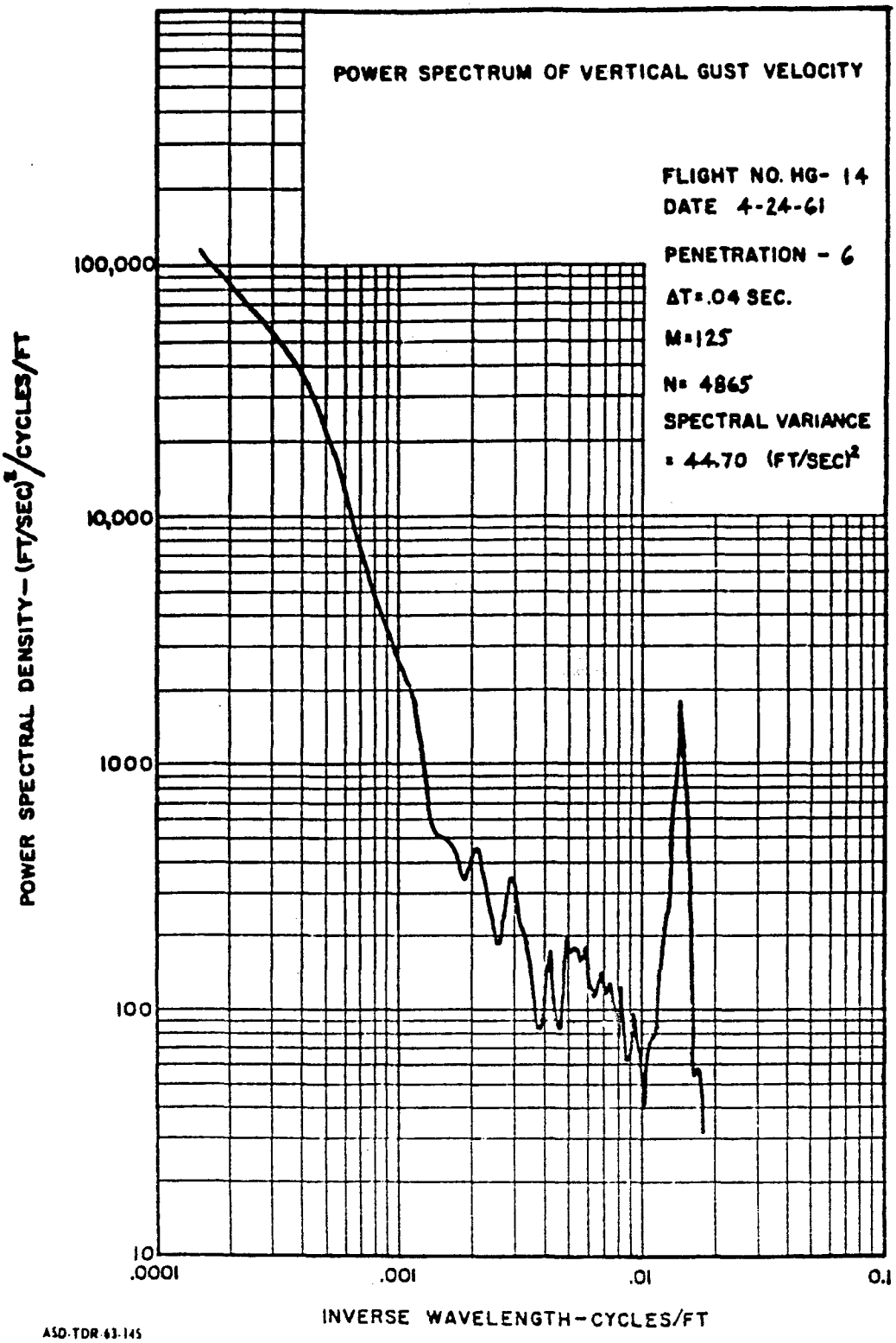
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT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FLIGHT NO. HG- 14
DATE 4-24-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 4865
SPECTRAL VARIANCE
= 44.70 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
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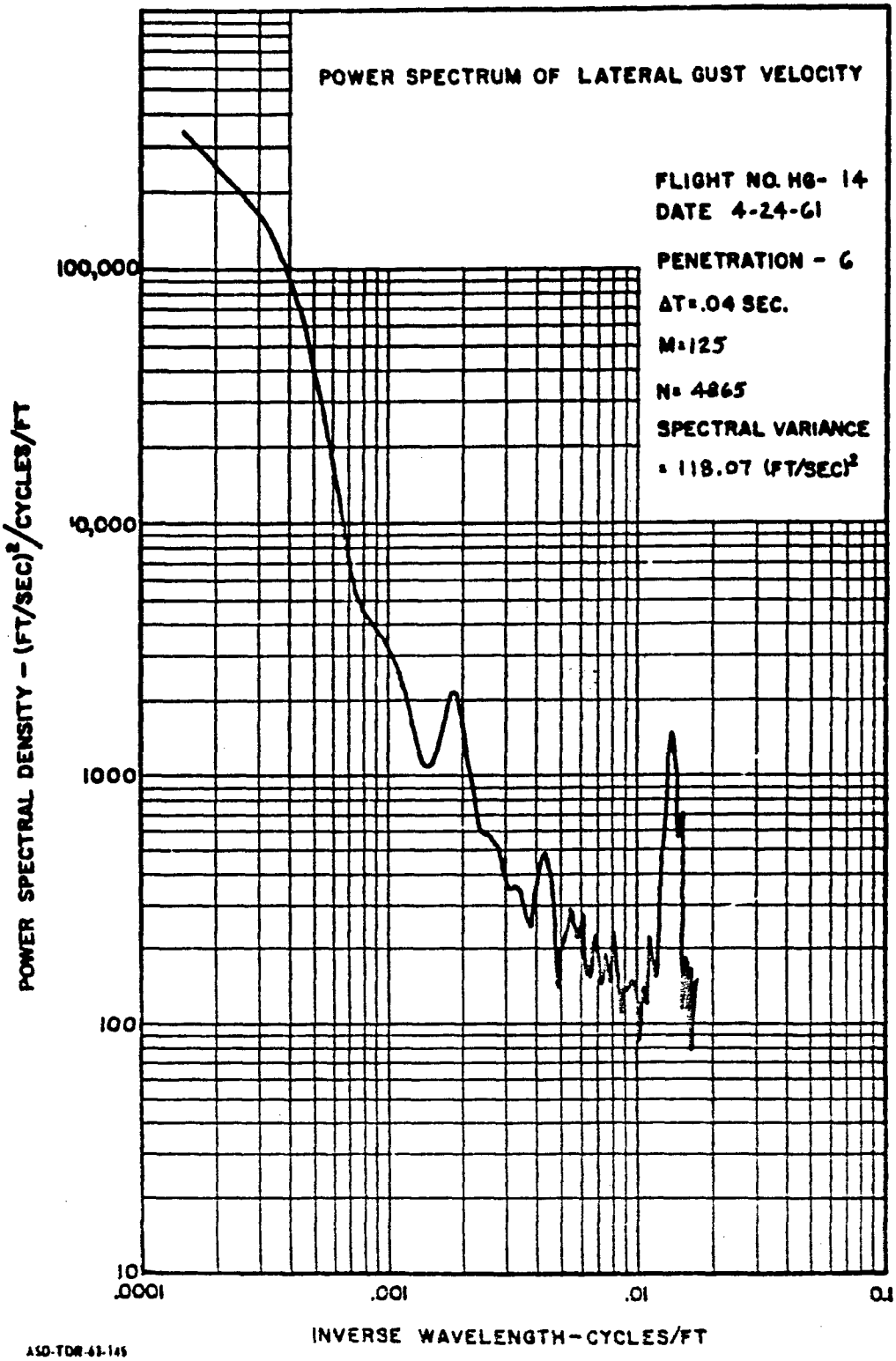
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT


POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 14
DATE 4-24-61
PENETRATION - 6
ΔT=.04 SEC.
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SPECTRAL VARIANCE
= 118.07 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
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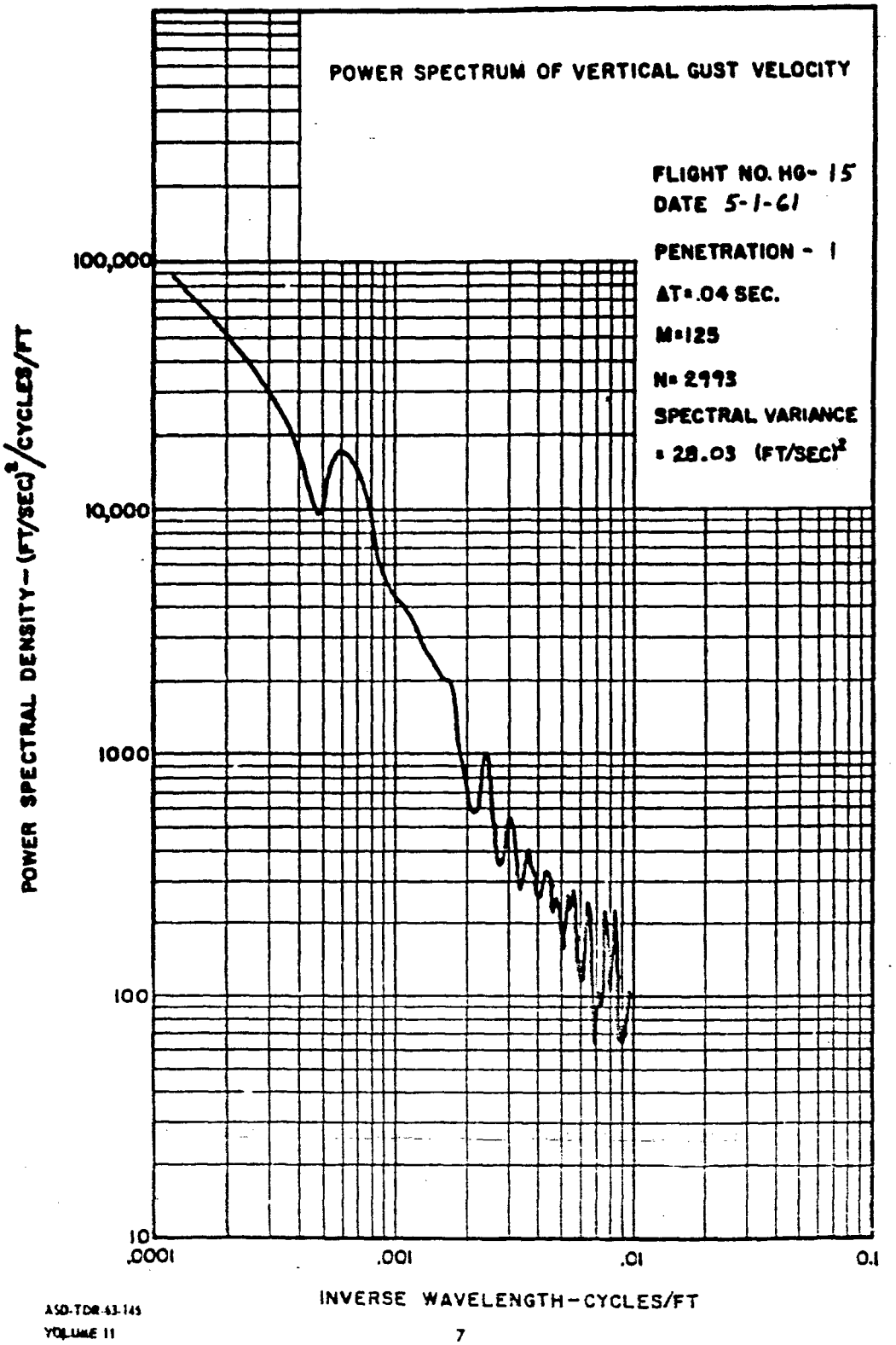
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT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FLIGHT NO. HG- 15
DATE 5-1-61
PENETRATION - 1
ΔT=.04 SEC.
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N= 2993
SPECTRAL VARIANCE
= 28.03 (FT/SEC)²
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10,000
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10
.0001
.001
.01
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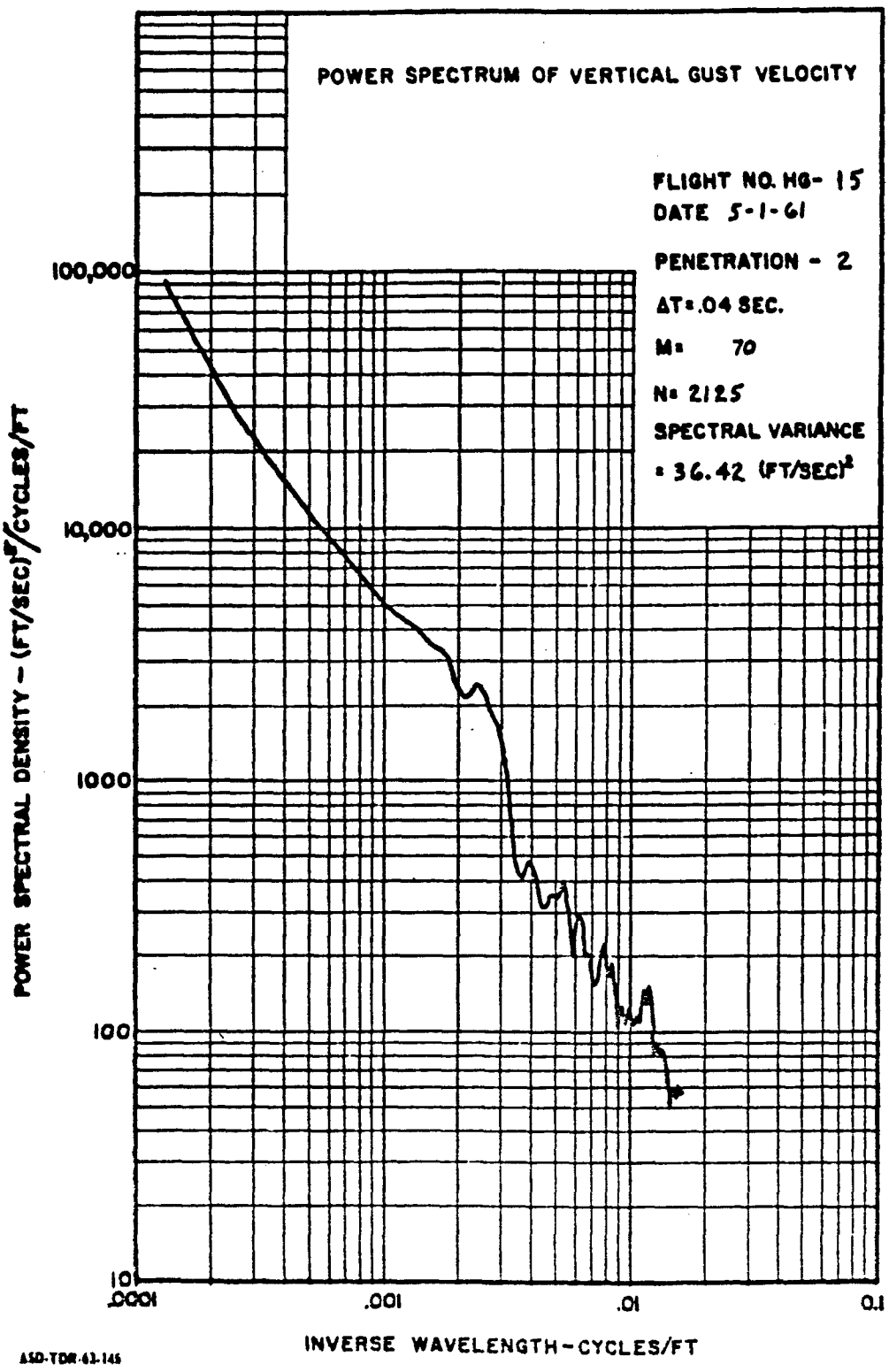
INVERSE WAVELENGTH - CYCLES/FT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FLIGHT NO. HG- 15
DATE 5-1-61
PENETRATION - 2
ΔT=.04 SEC.
M= 70
N= 2125
SPECTRAL VARIANCE
= 36.42 (FT/SEC)²
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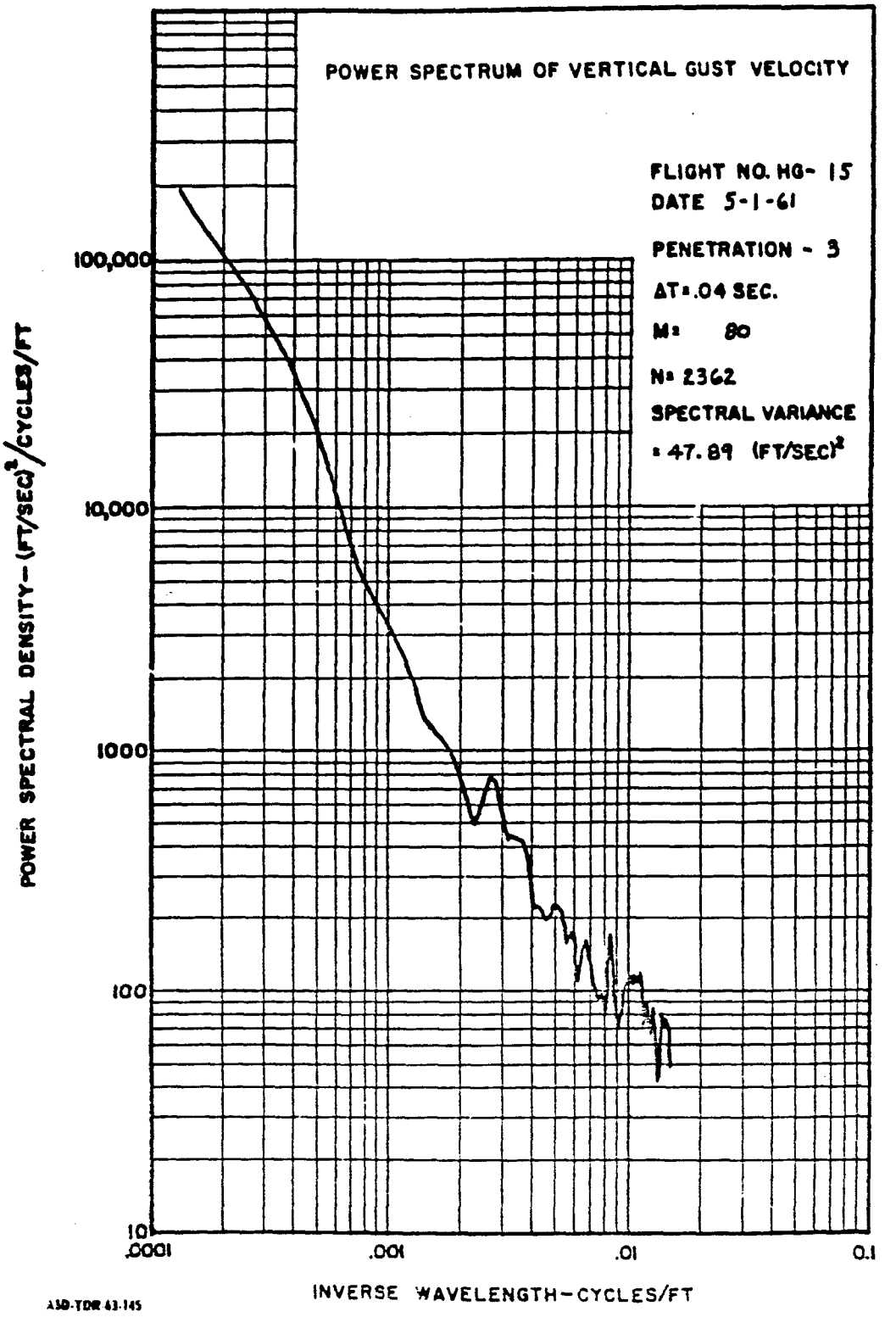
INVERSE WAVELENGTH - CYCLES/FT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FLIGHT NO. HG- 15
DATE 5-1-61
PENETRATION - 3
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N= 2362
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= 47.89 (FT/SEC)²
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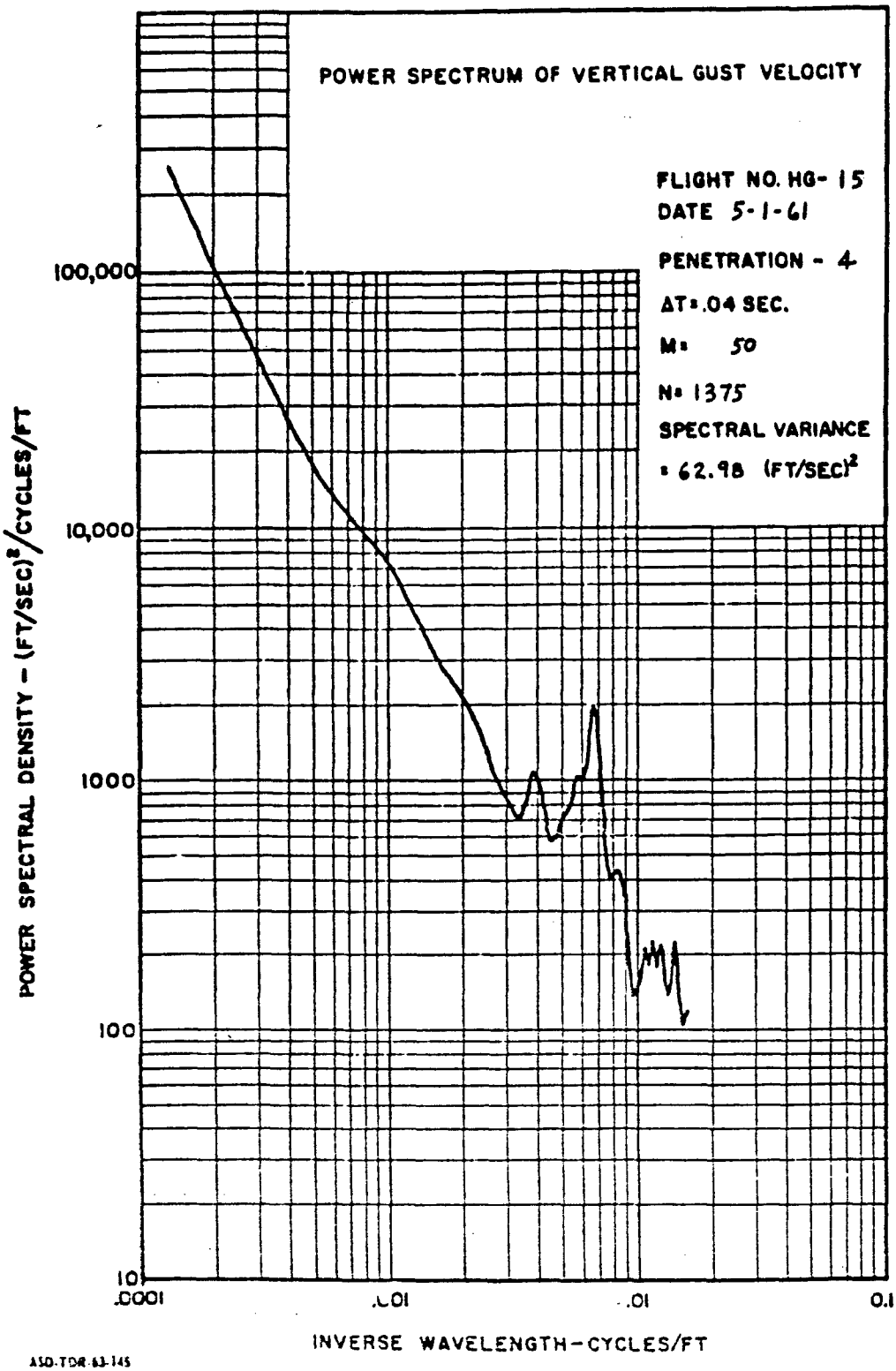
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FLIGHT NO. HG- 15
DATE 5-1-61
PENETRATION - 4
ΔT = .04 SEC.
M = 50
N = 1375
SPECTRAL VARIANCE
= 62.98 (FT/SEC)²
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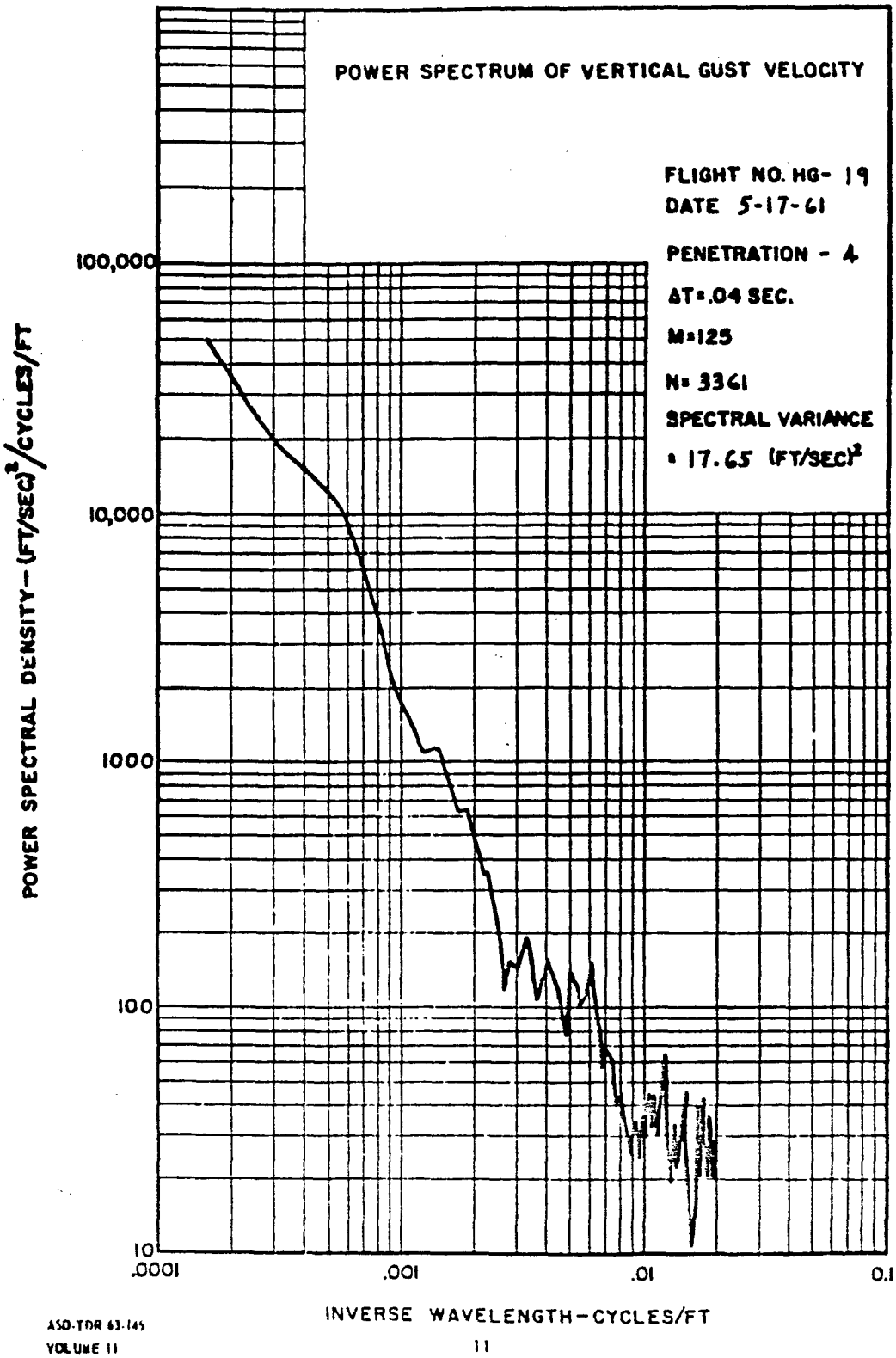
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DATE 5-17-61
PENETRATION - 4
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N= 3361
SPECTRAL VARIANCE
= 17.65 (FT/SEC)²
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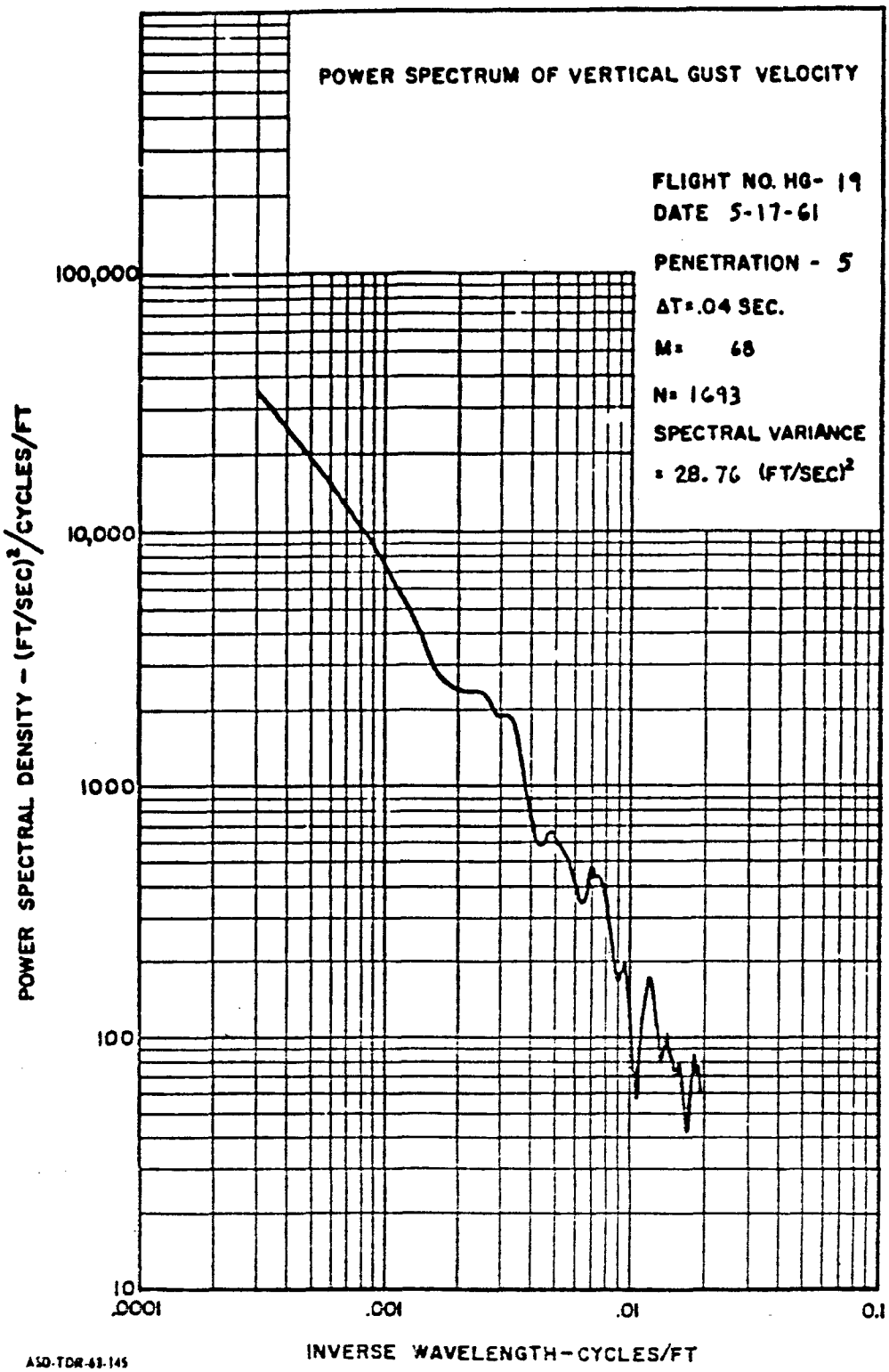
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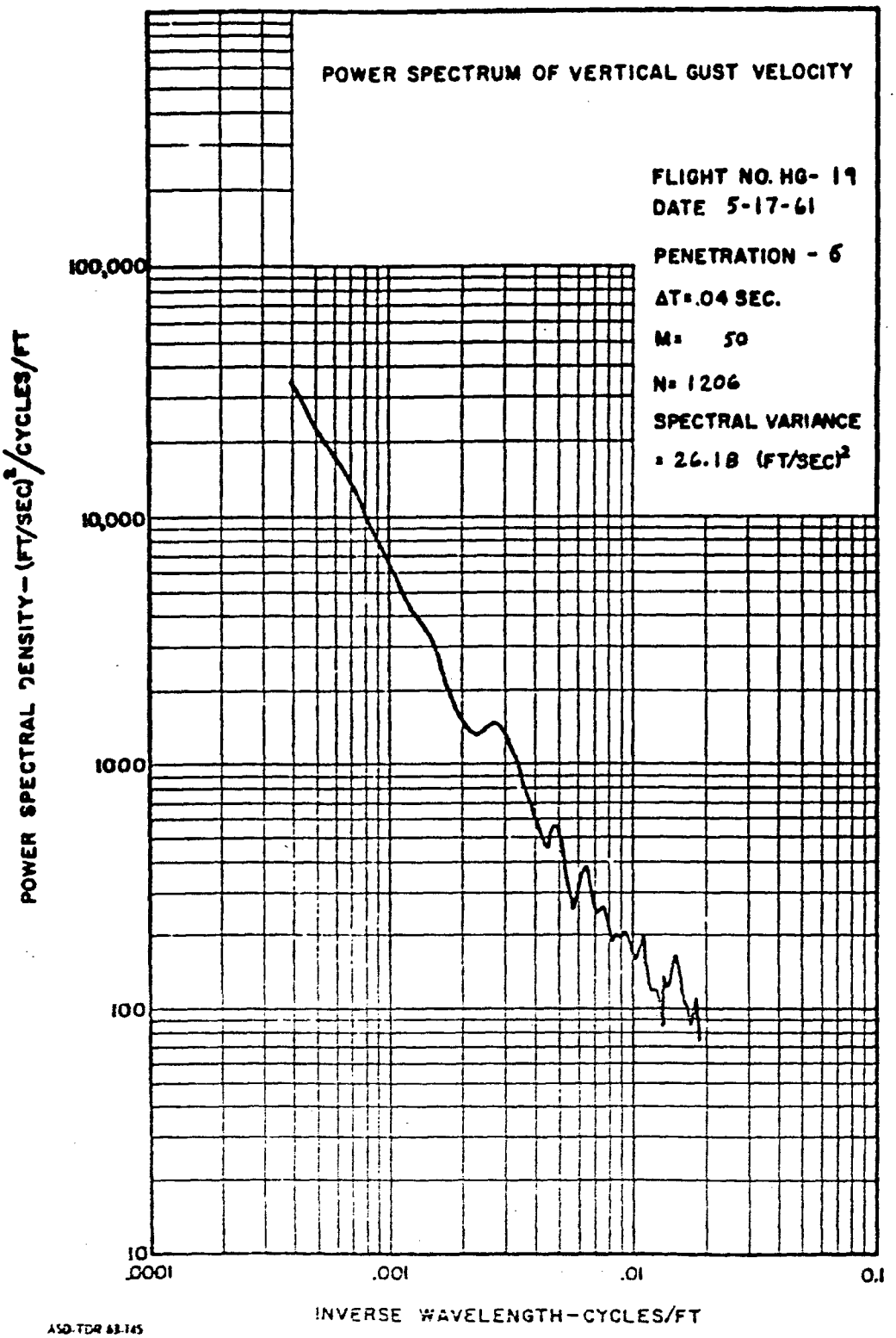
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DATE 5-17-61
PENETRATION - 6
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N= 1206
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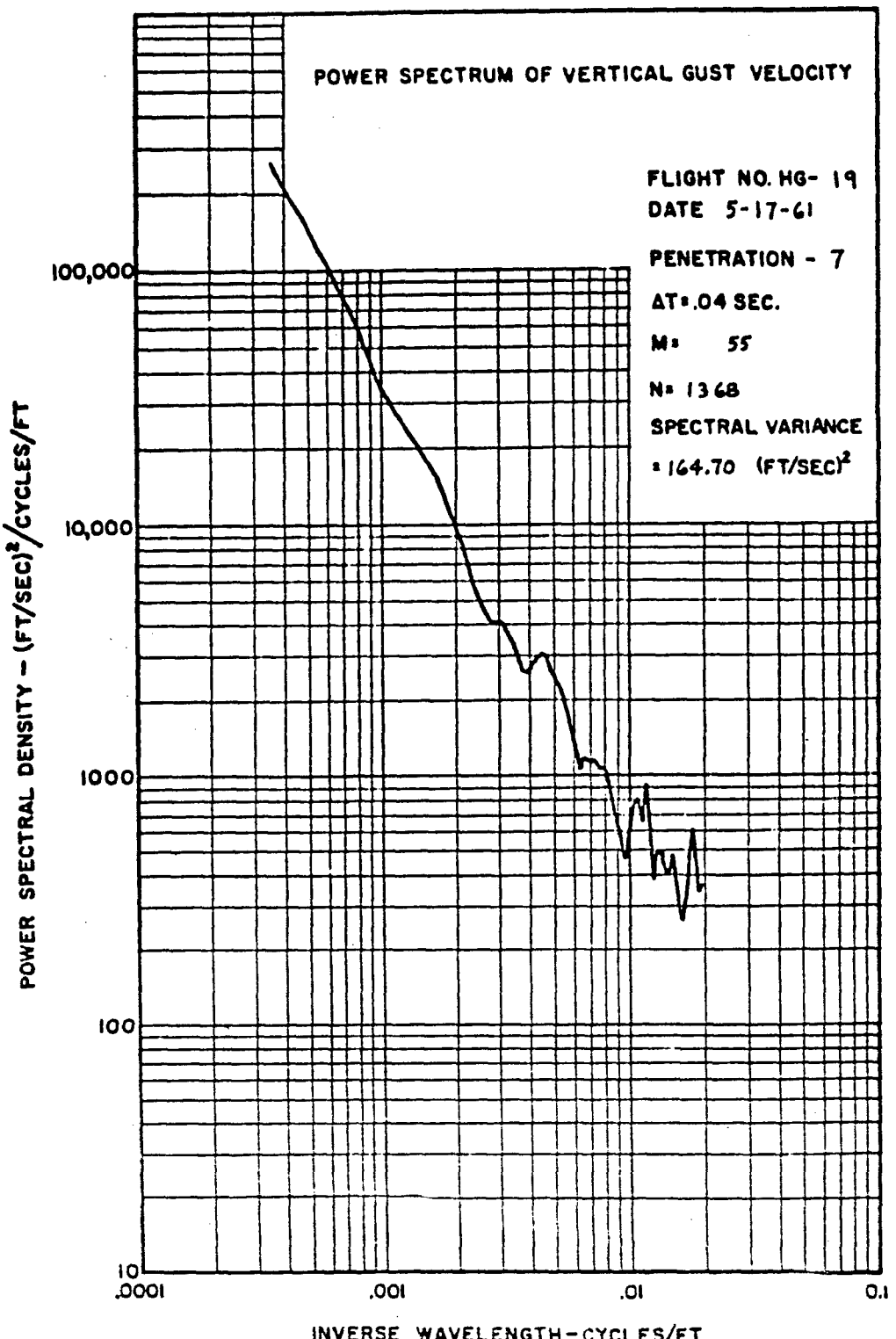
INVERSE WAVELENGTH-CYCLES/FT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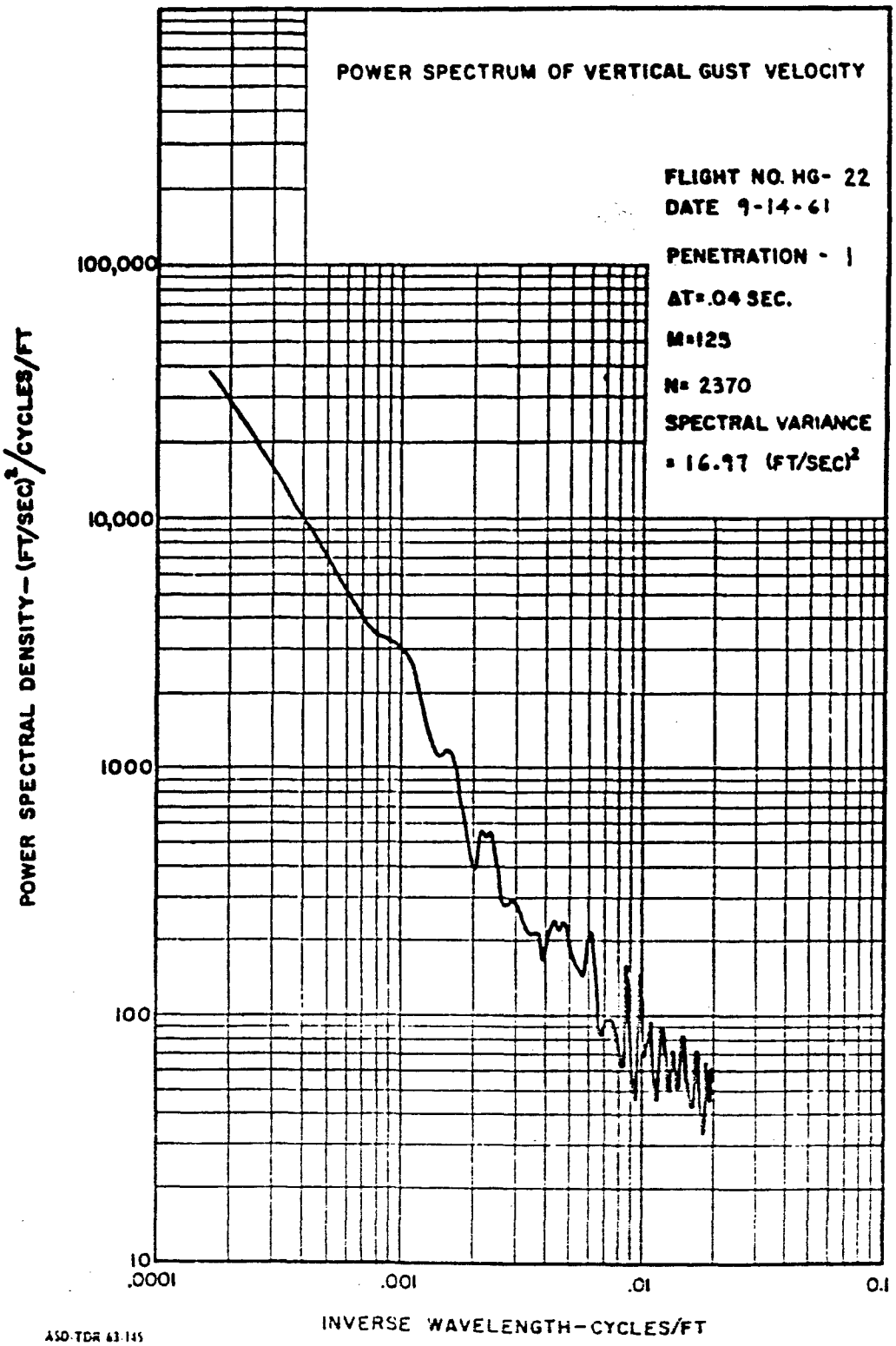
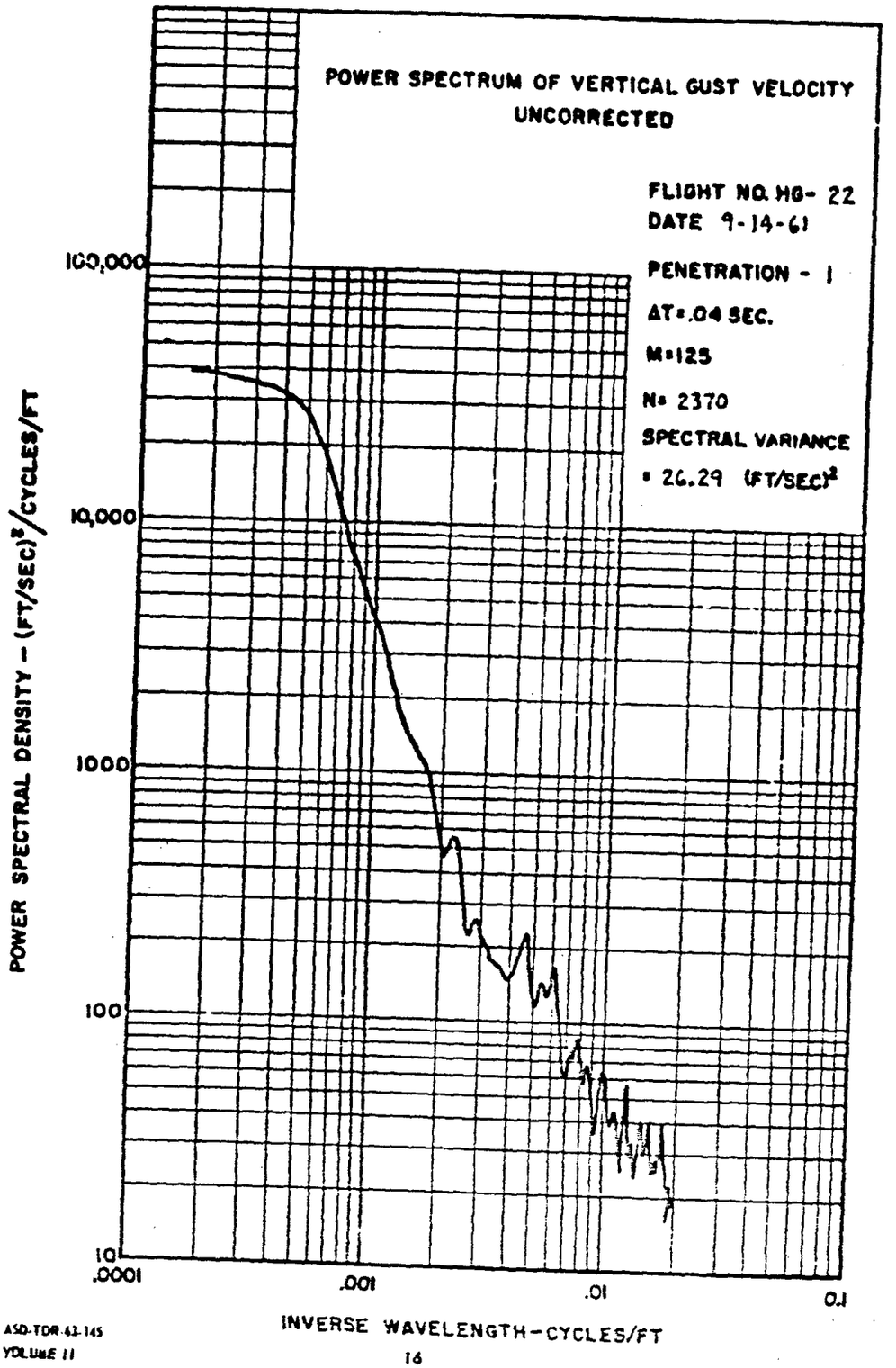
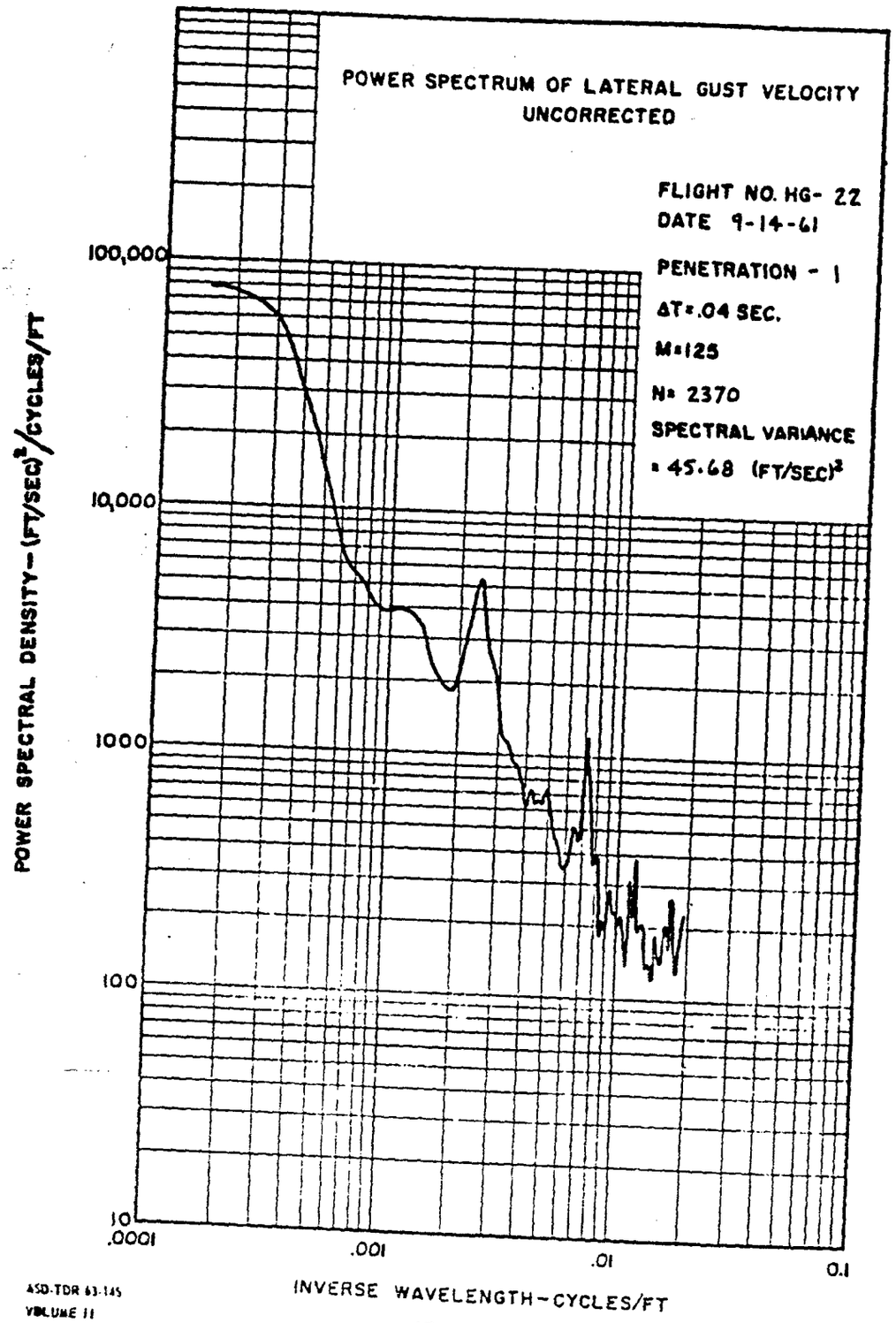
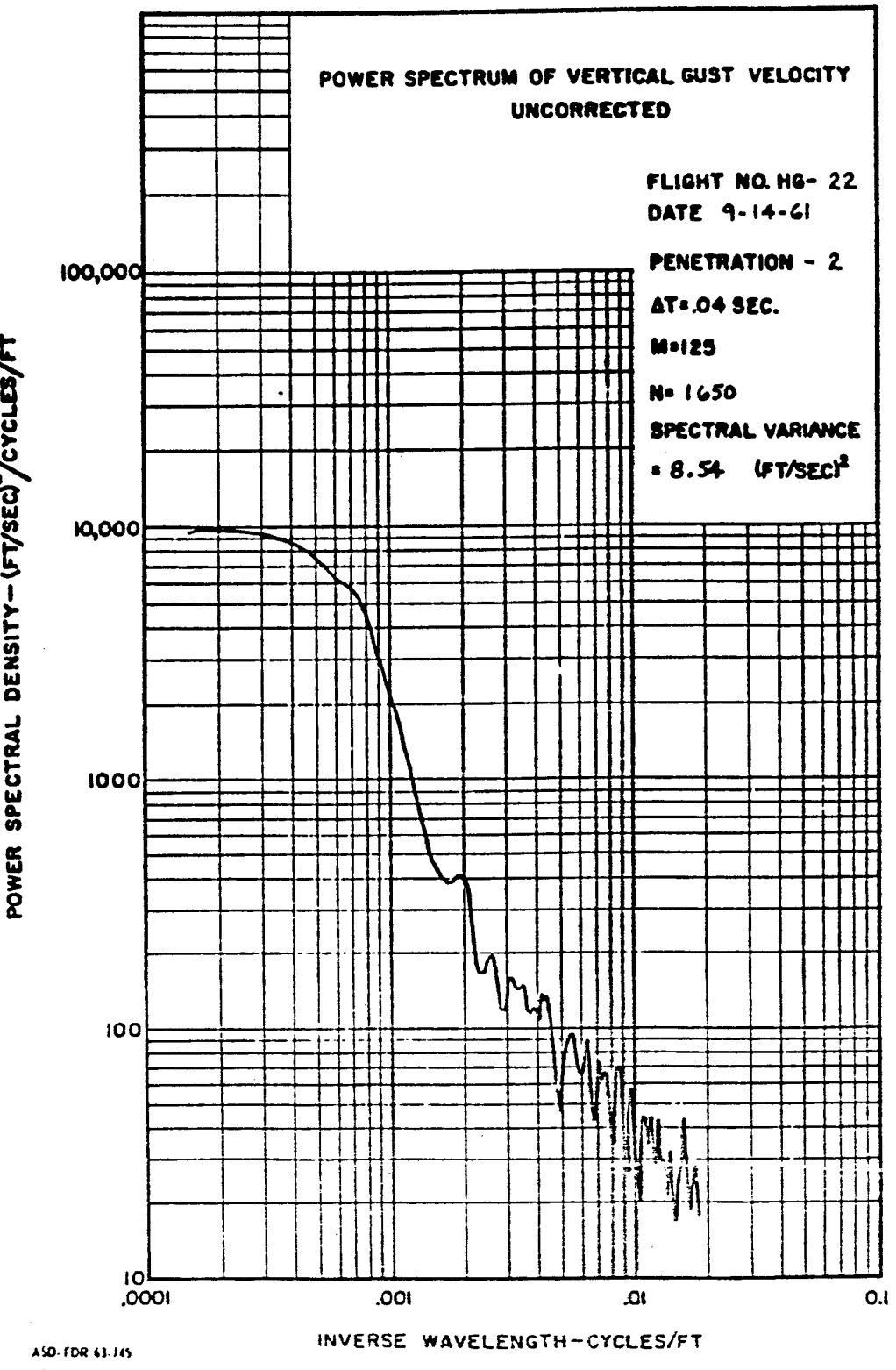
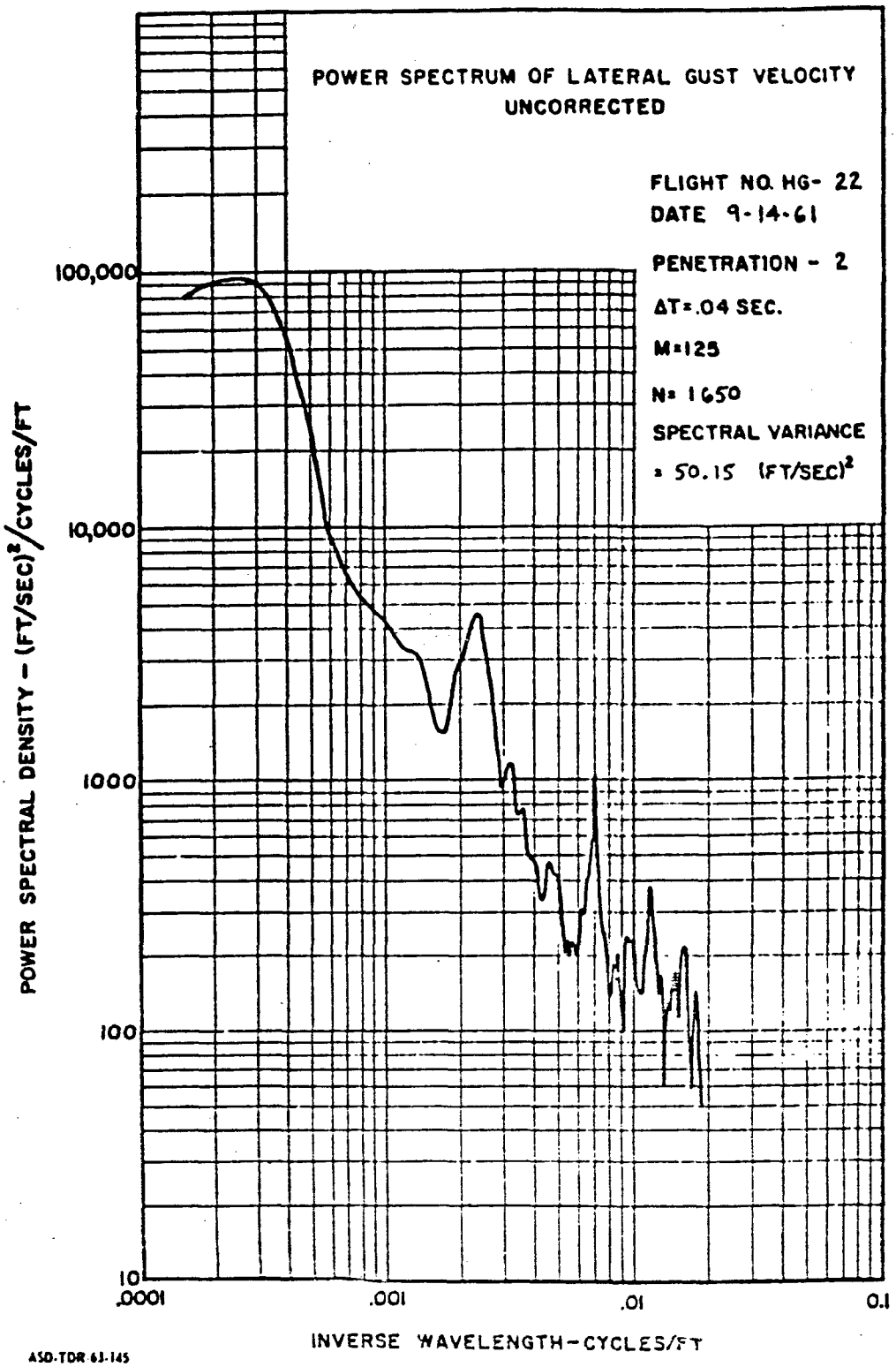
FLIGHT NO. HG- 19
DATE 5-17-61
PENETRATION - 7
ΔT=.04 SEC.
M= 55
N= 1368
SPECTRAL VARIANCE
=164.70 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

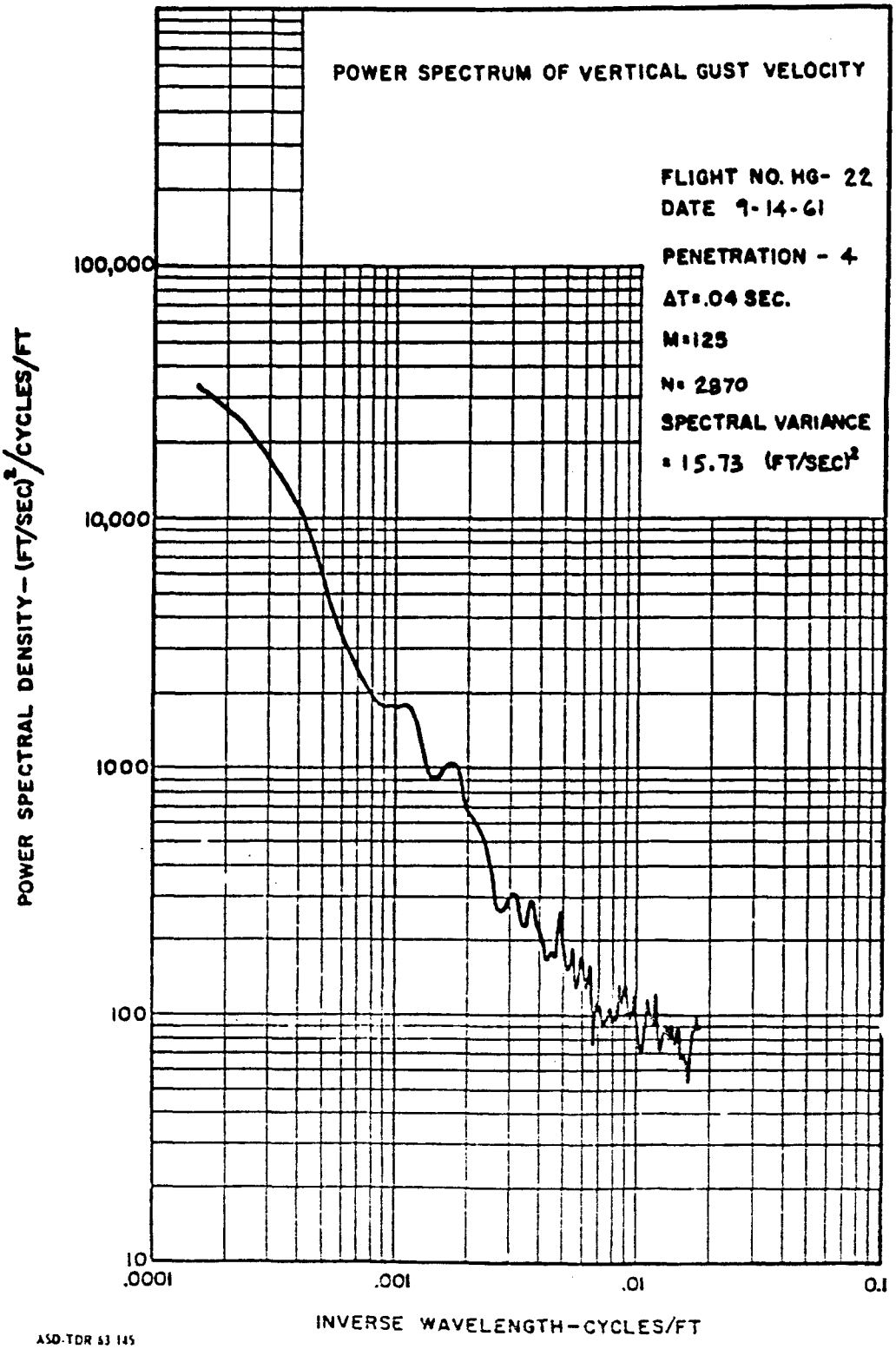

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2370
SPECTRAL VARIANCE
= 16.97 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

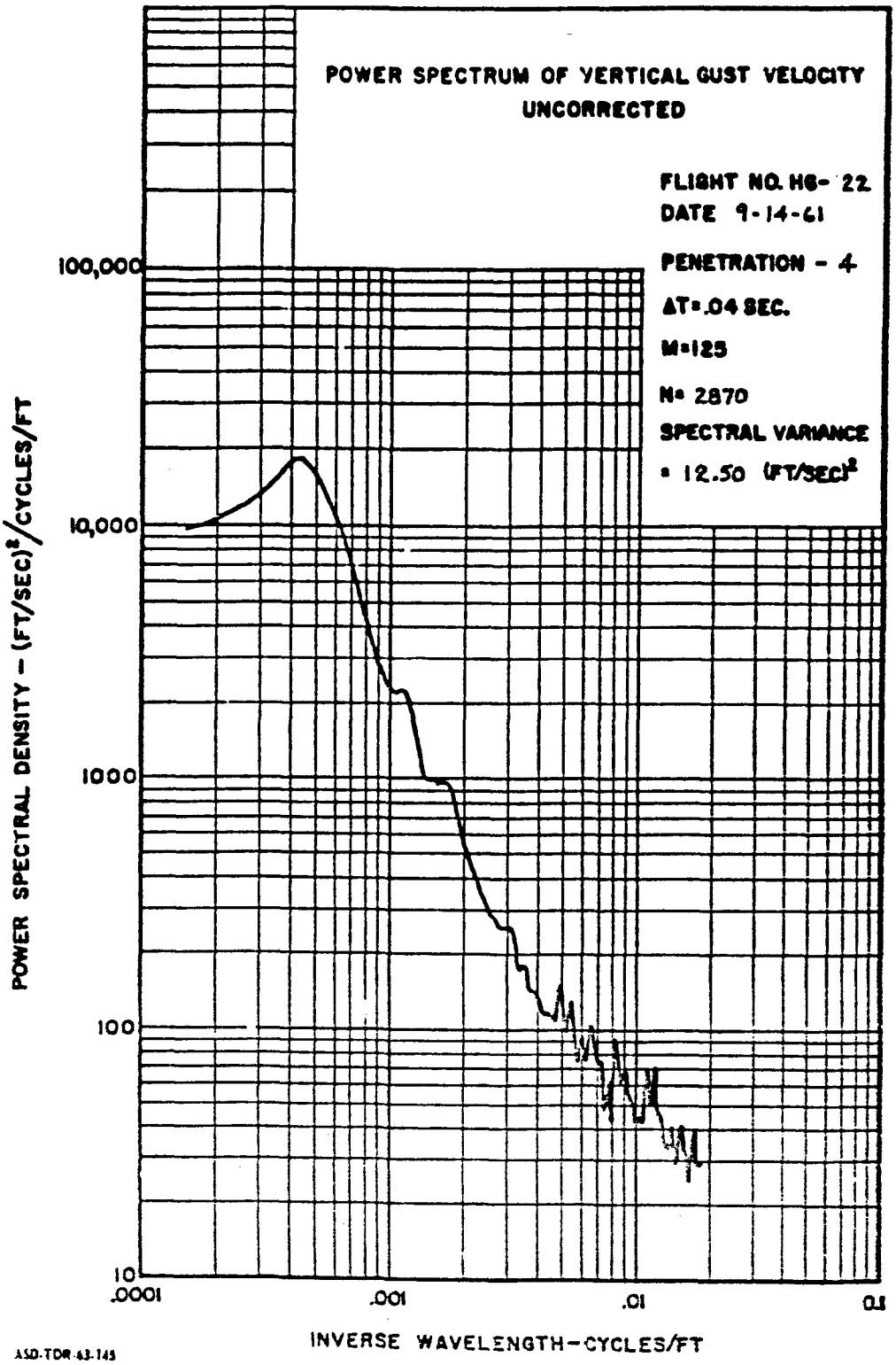

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2370
SPECTRAL VARIANCE
= 26.29 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

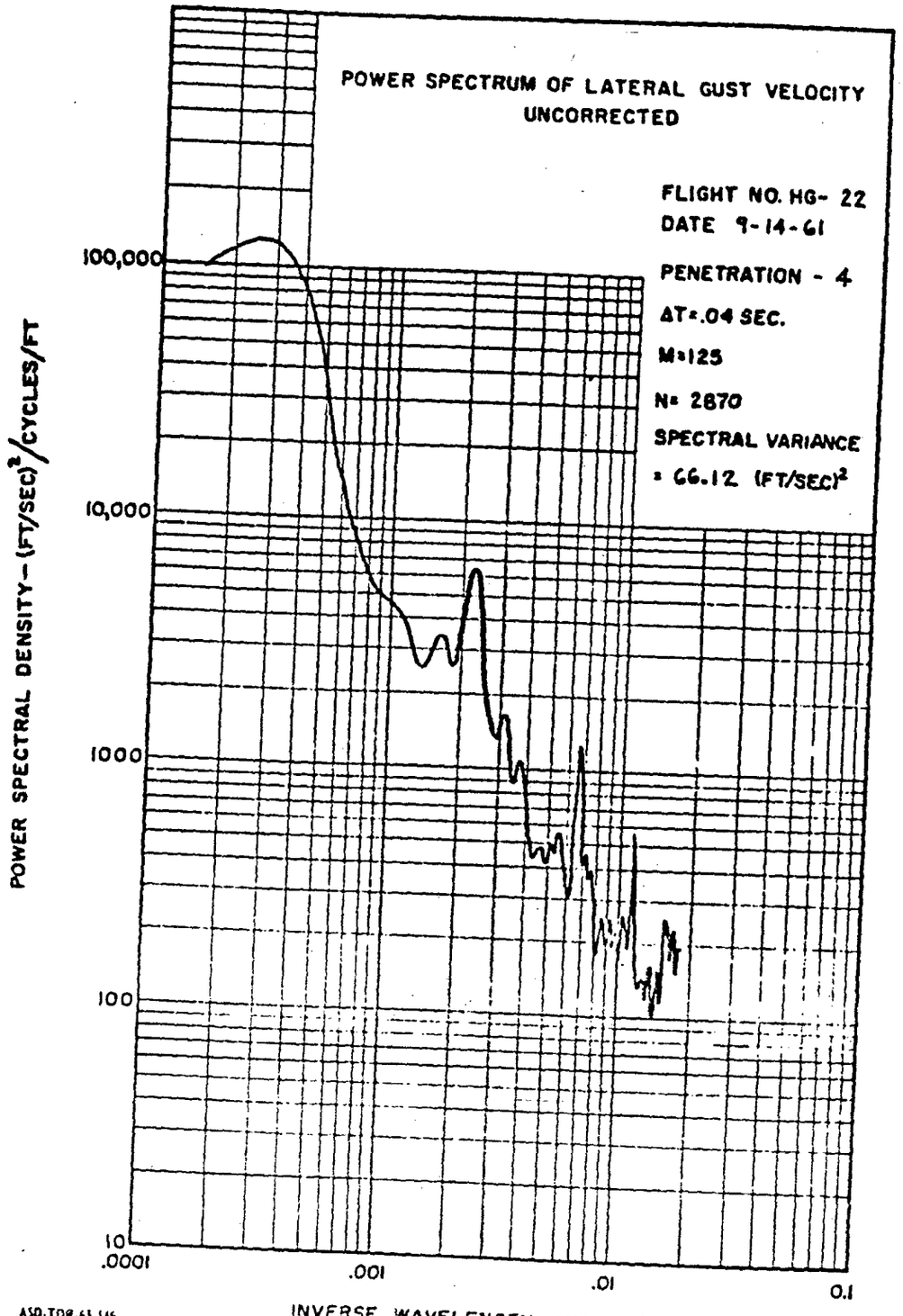

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2370
SPECTRAL VARIANCE
= 45.68 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

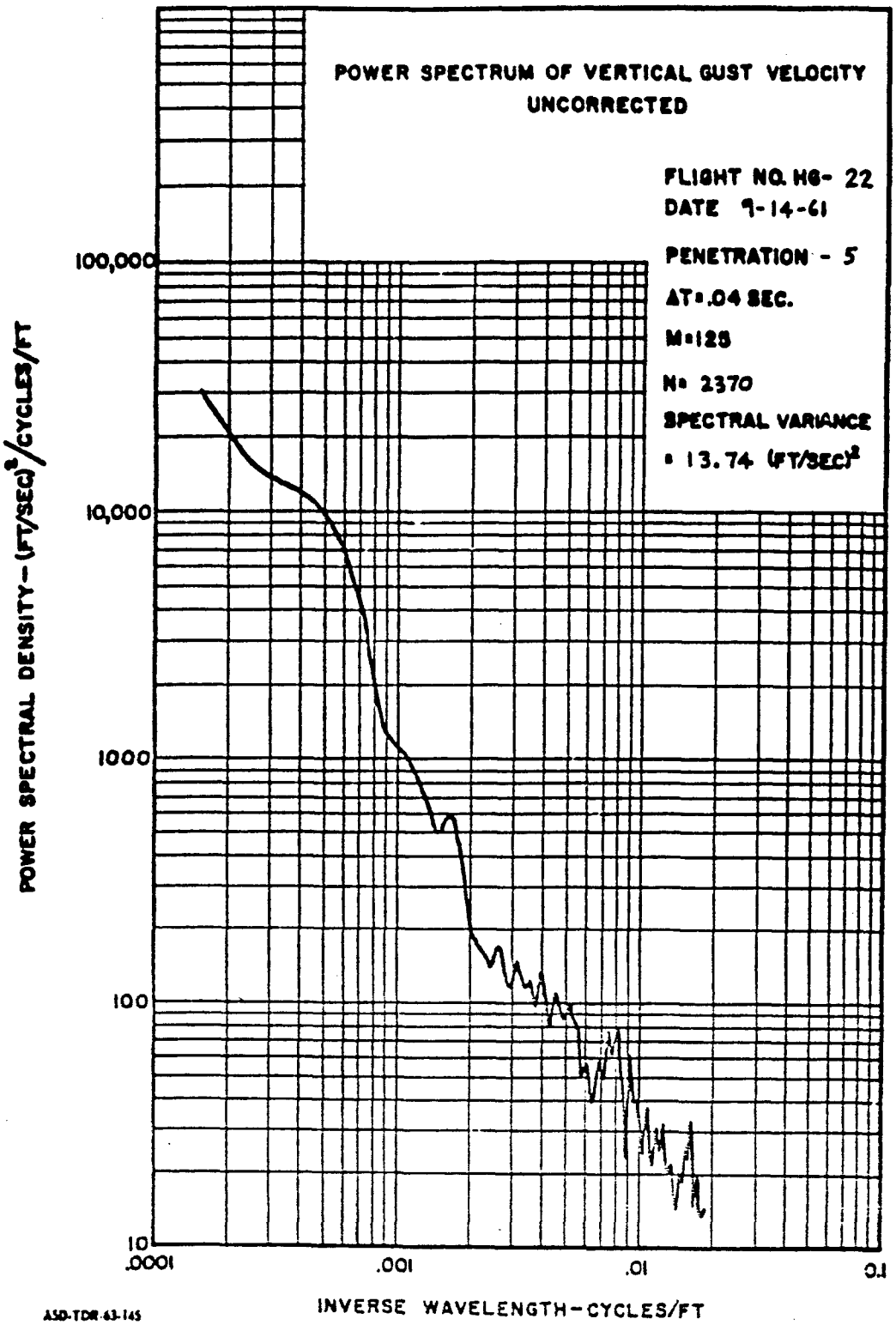

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 1650
SPECTRAL VARIANCE
= 8.54 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

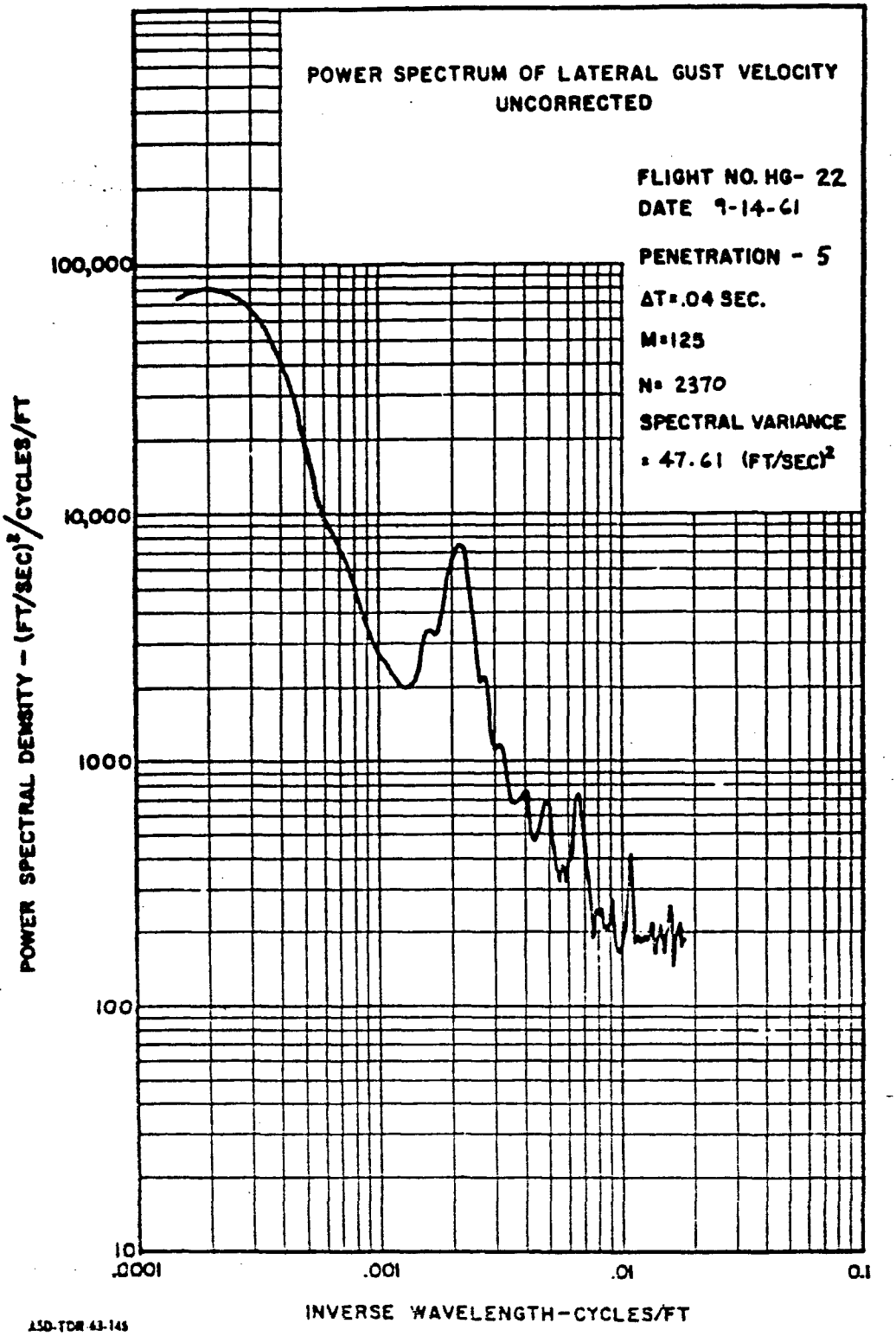

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 1650
SPECTRAL VARIANCE
= 50.15 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

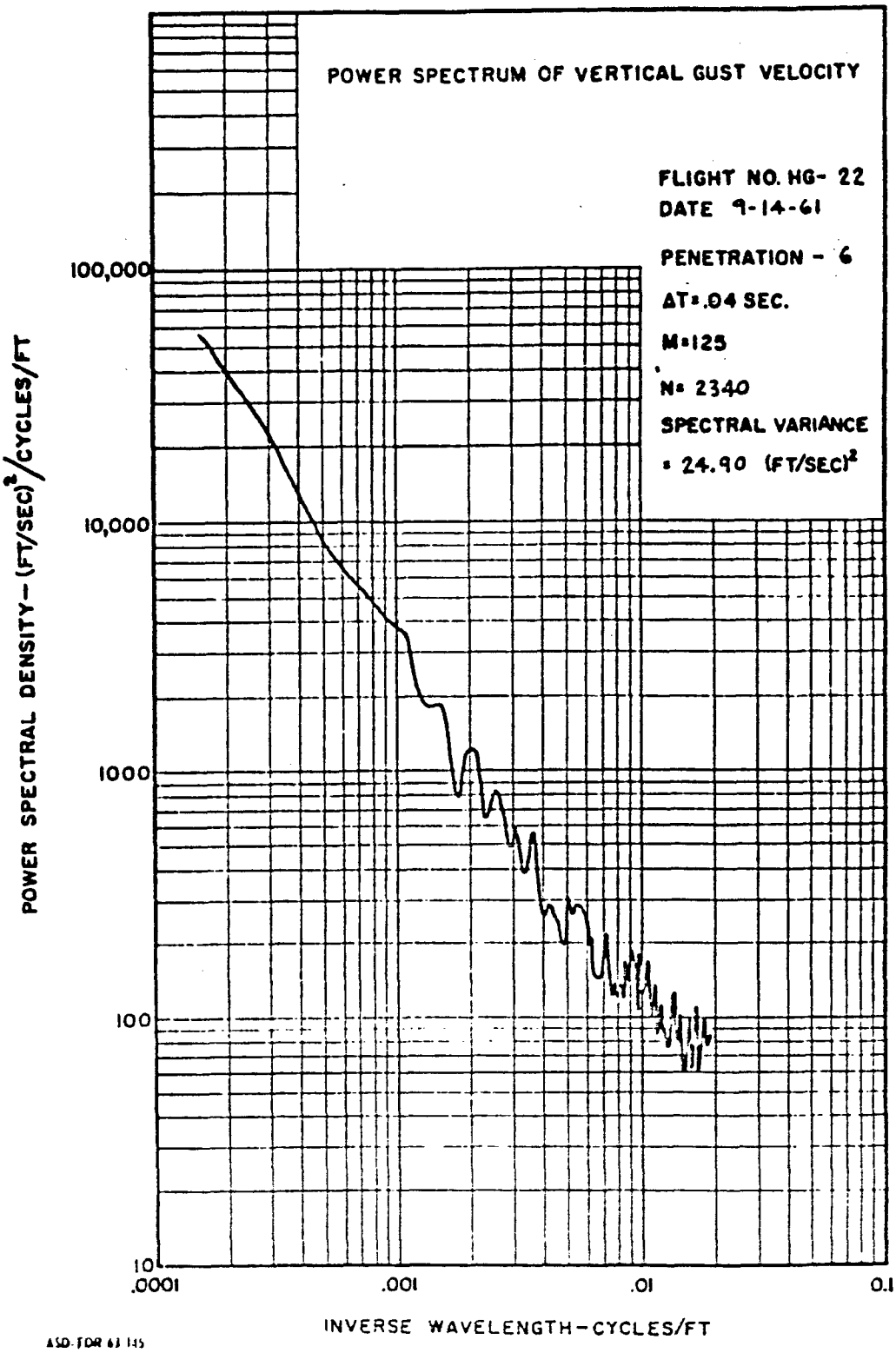

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2870
SPECTRAL VARIANCE
= 15.73 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

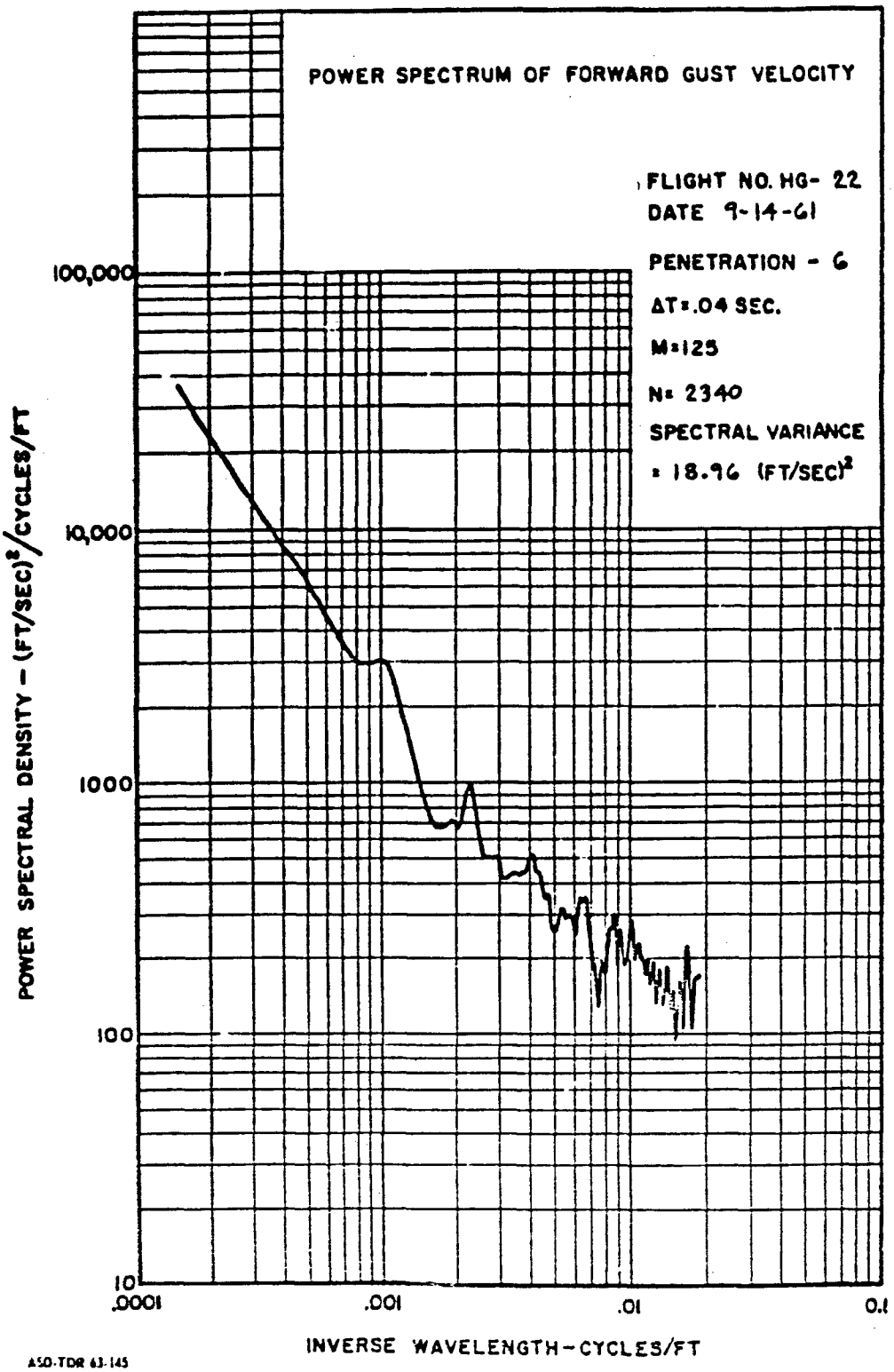

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 22
DATE 9-14-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2870
SPECTRAL VARIANCE
= 12.50 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

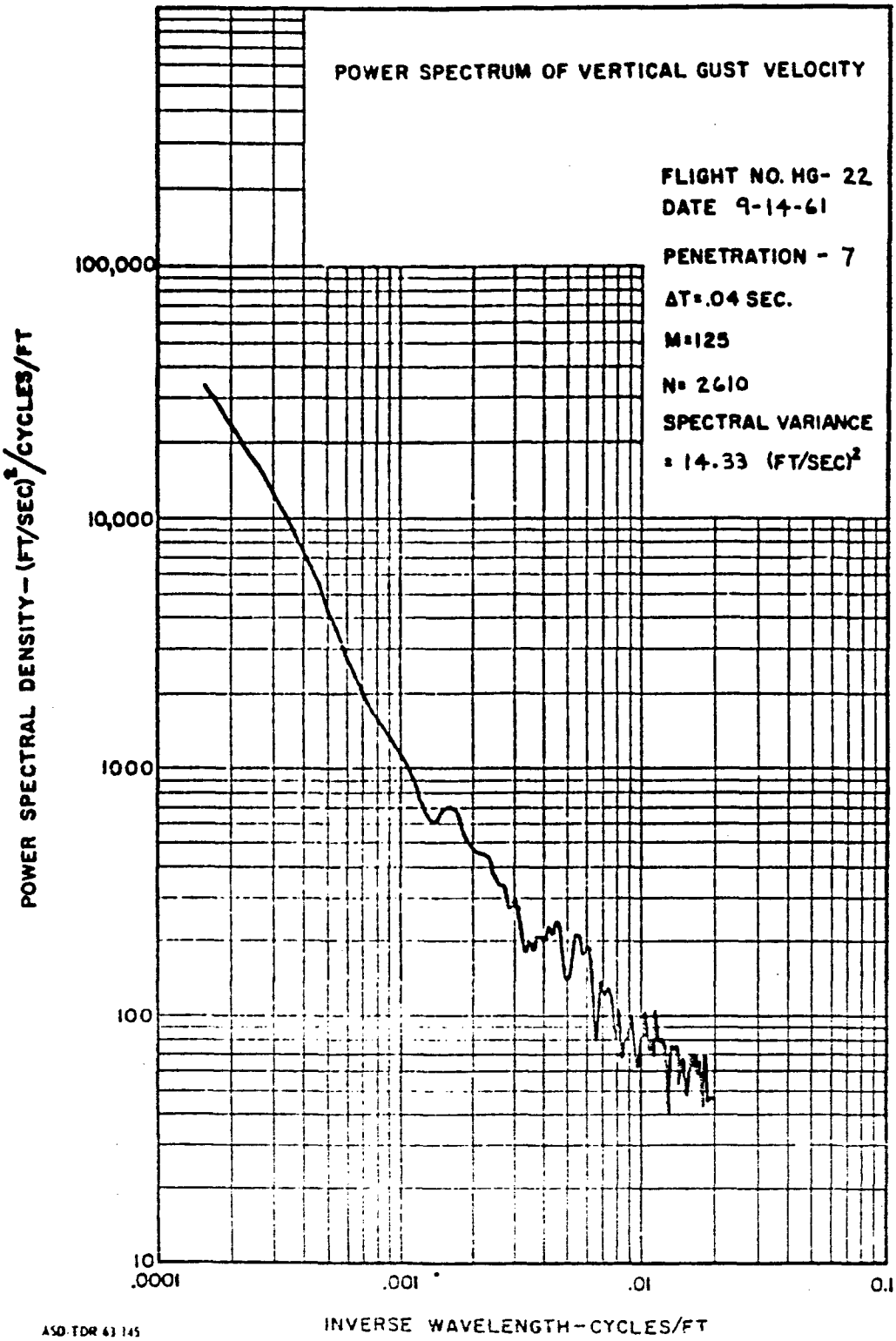

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2870
SPECTRAL VARIANCE
= 66.12 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

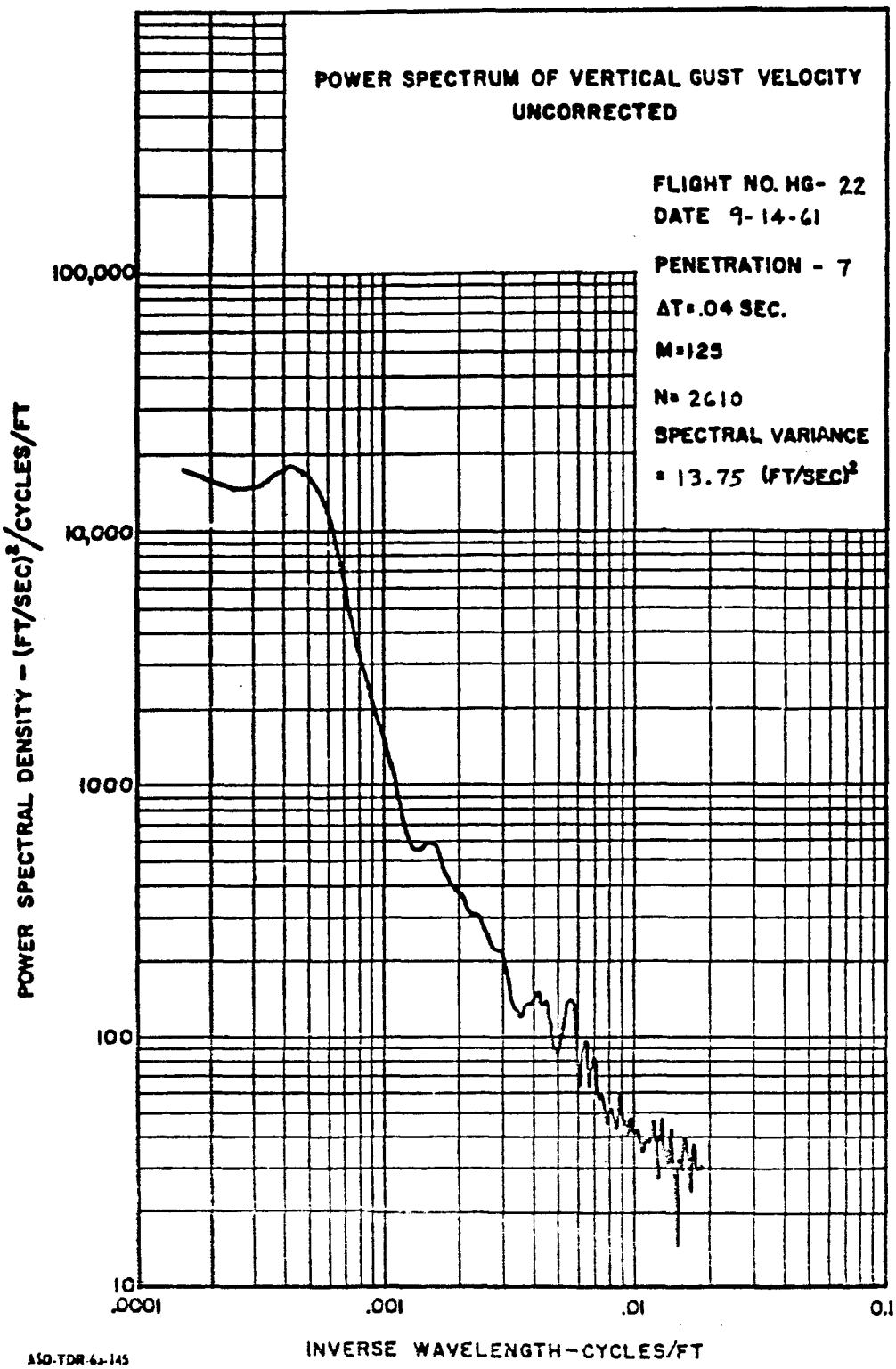

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 22
DATE 9-14-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 2370
SPECTRAL VARIANCE
= 13.74 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

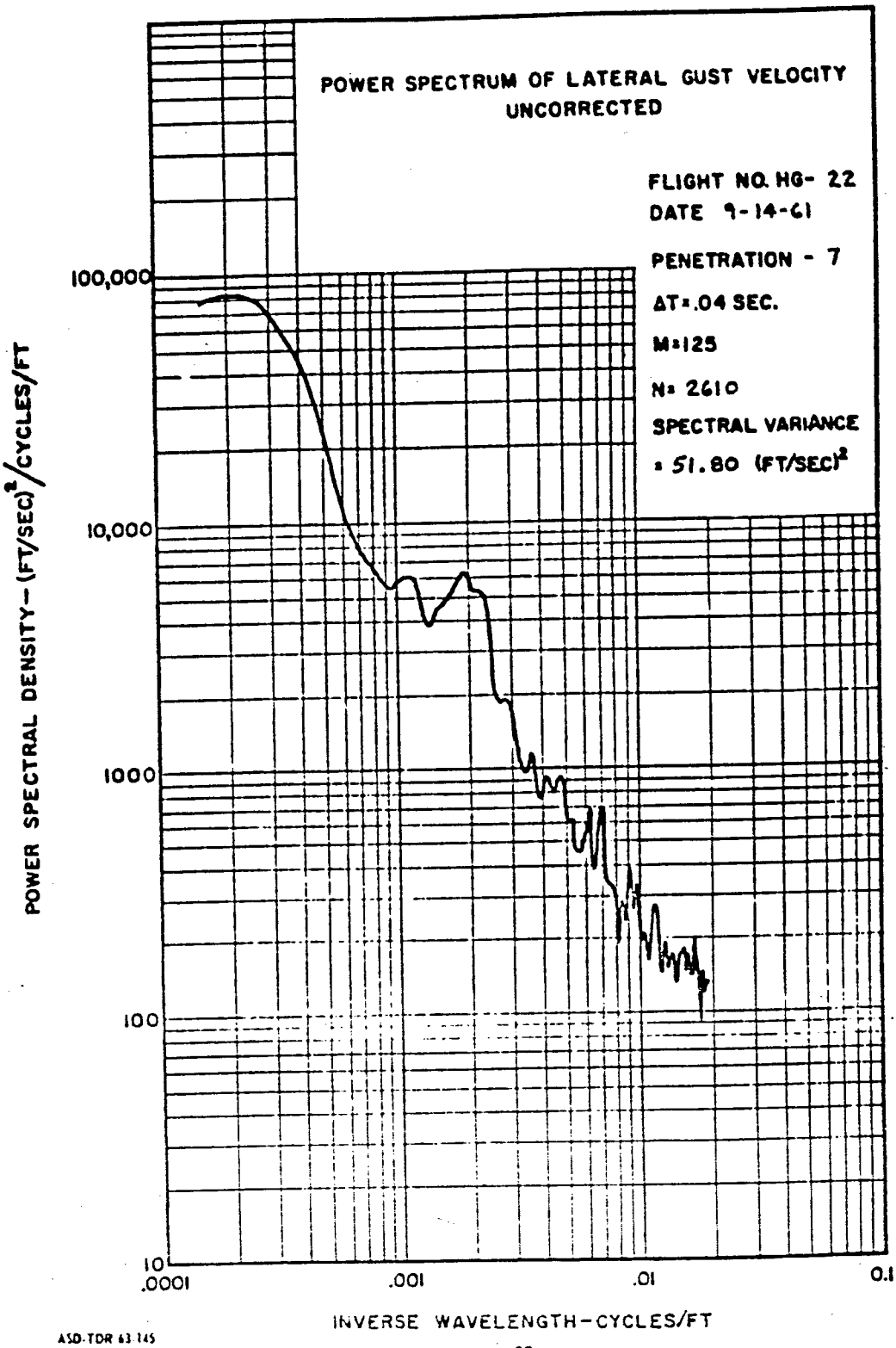

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 2370
SPECTRAL VARIANCE
= 47.61 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

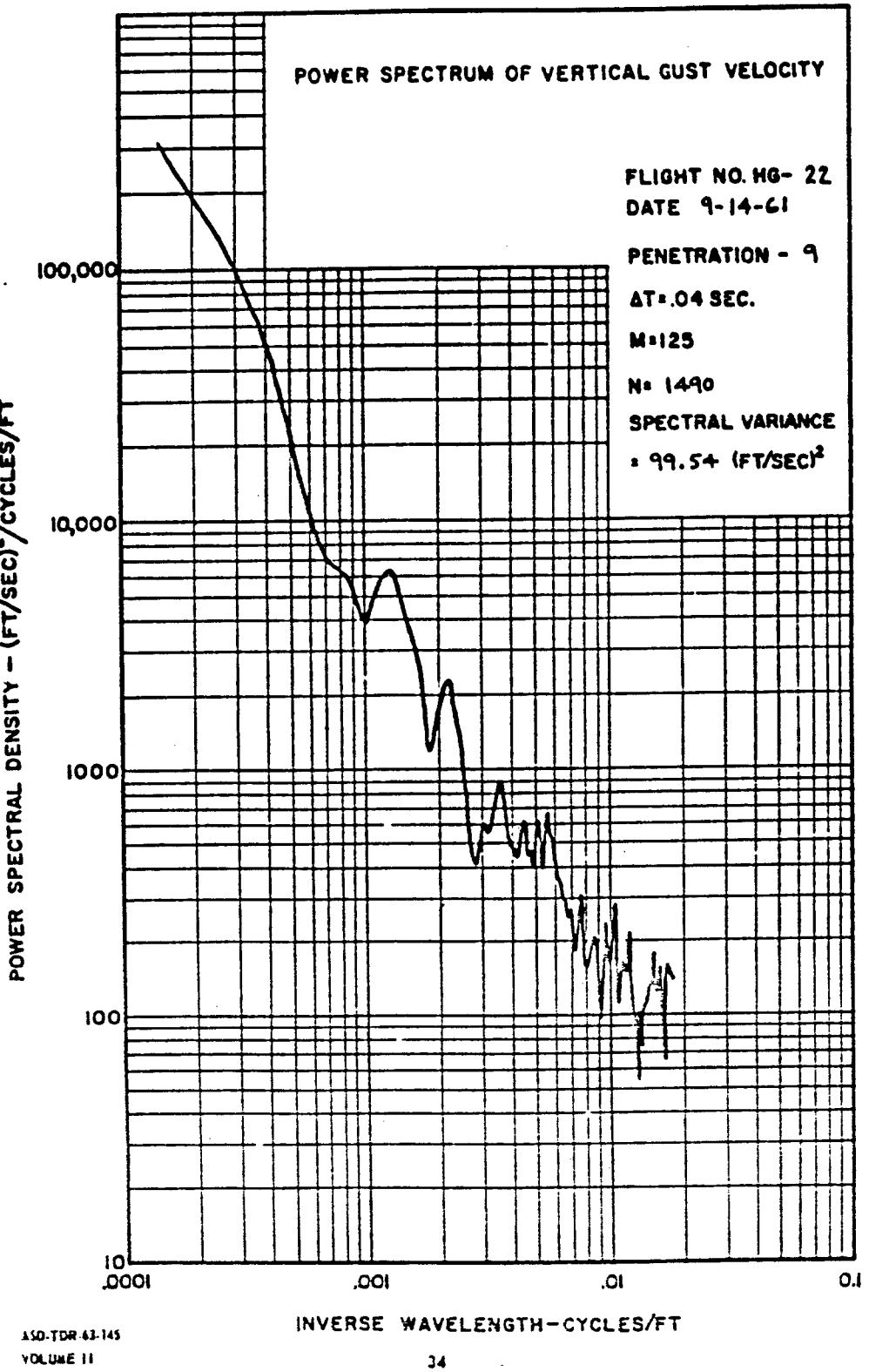

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2340
SPECTRAL VARIANCE
= 24.90 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

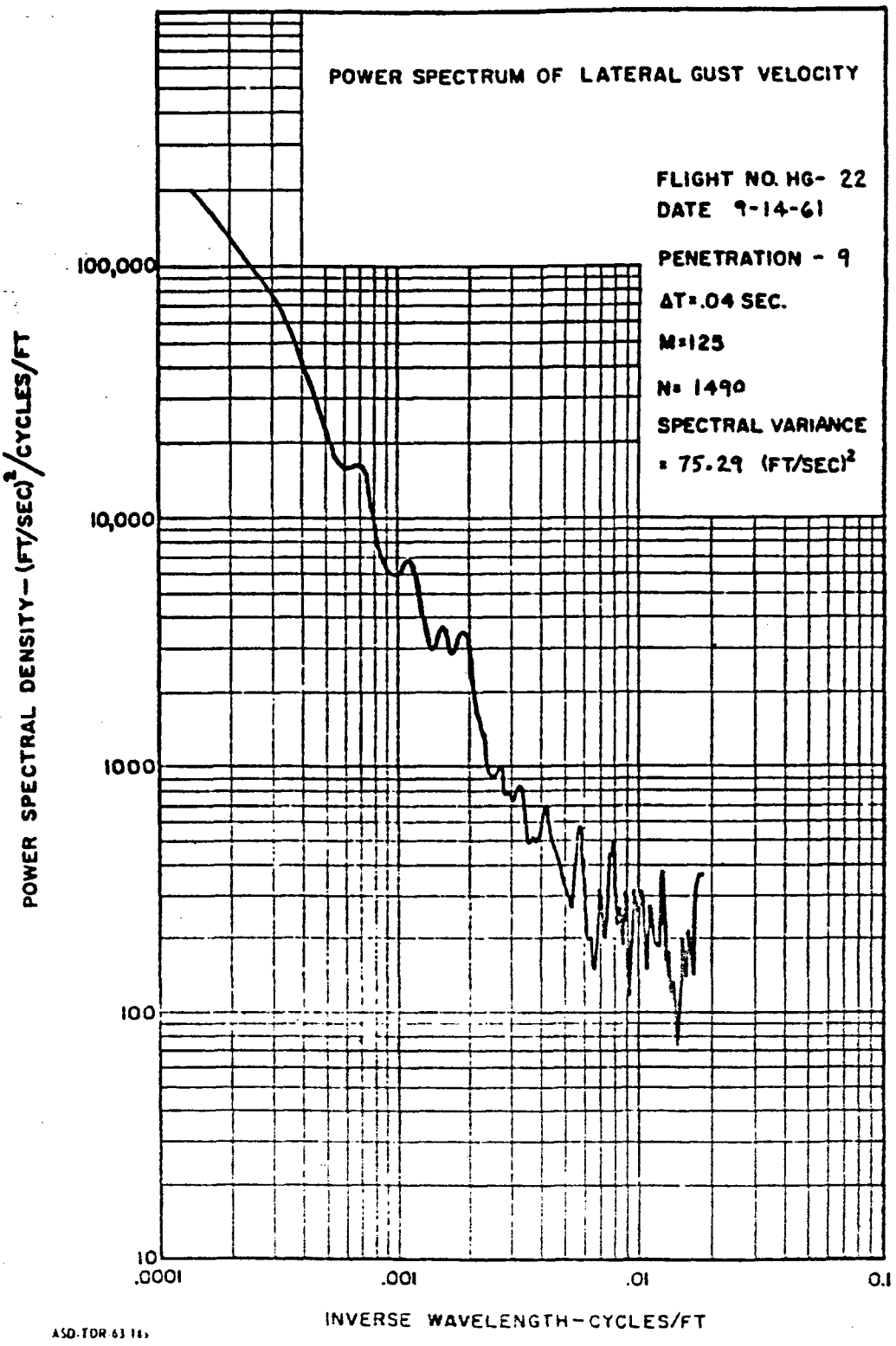

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2340
SPECTRAL VARIANCE
= 18.96 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

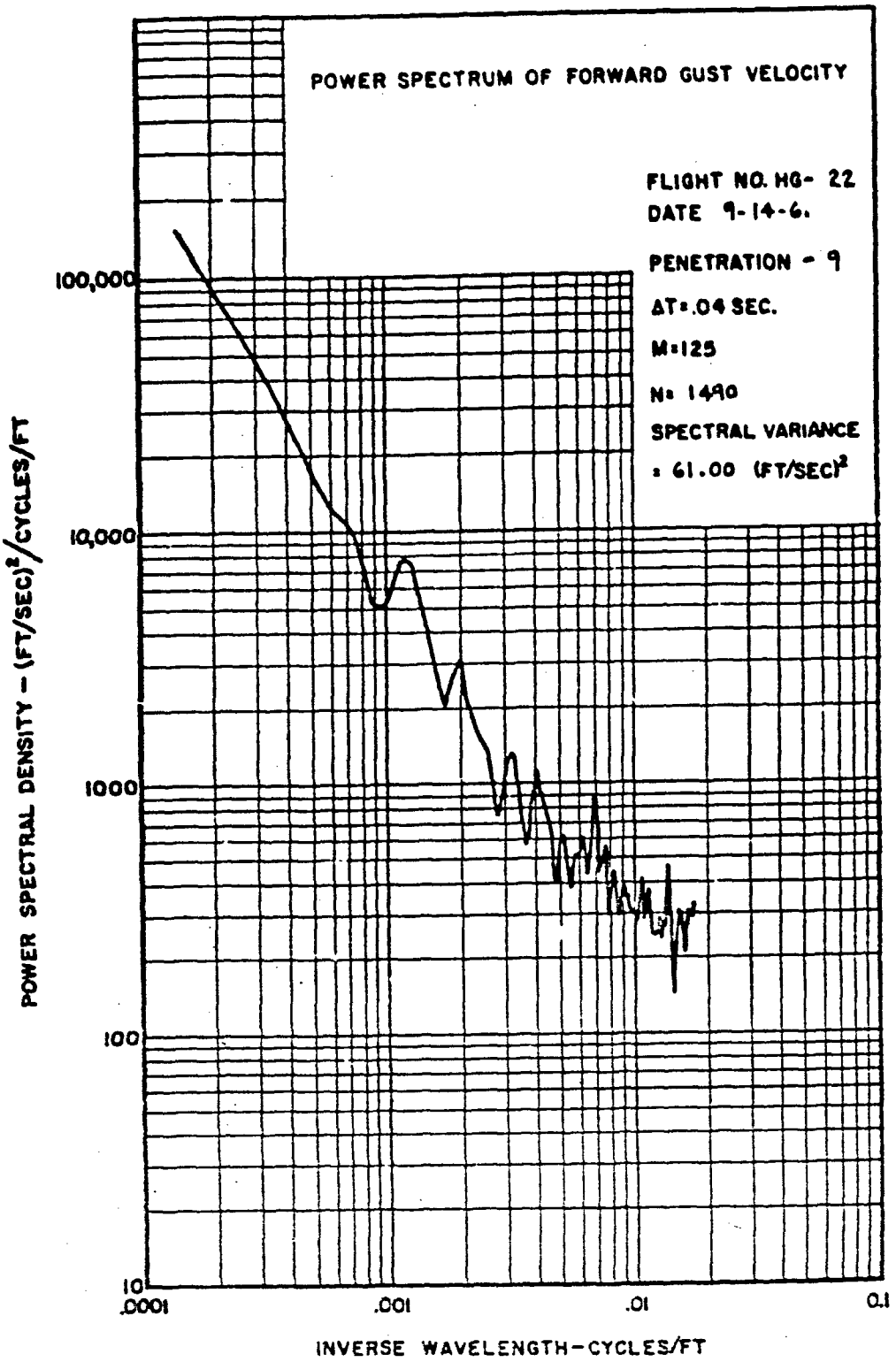

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. MG- 22
DATE 9-14-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 2610
SPECTRAL VARIANCE
= 14.33 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

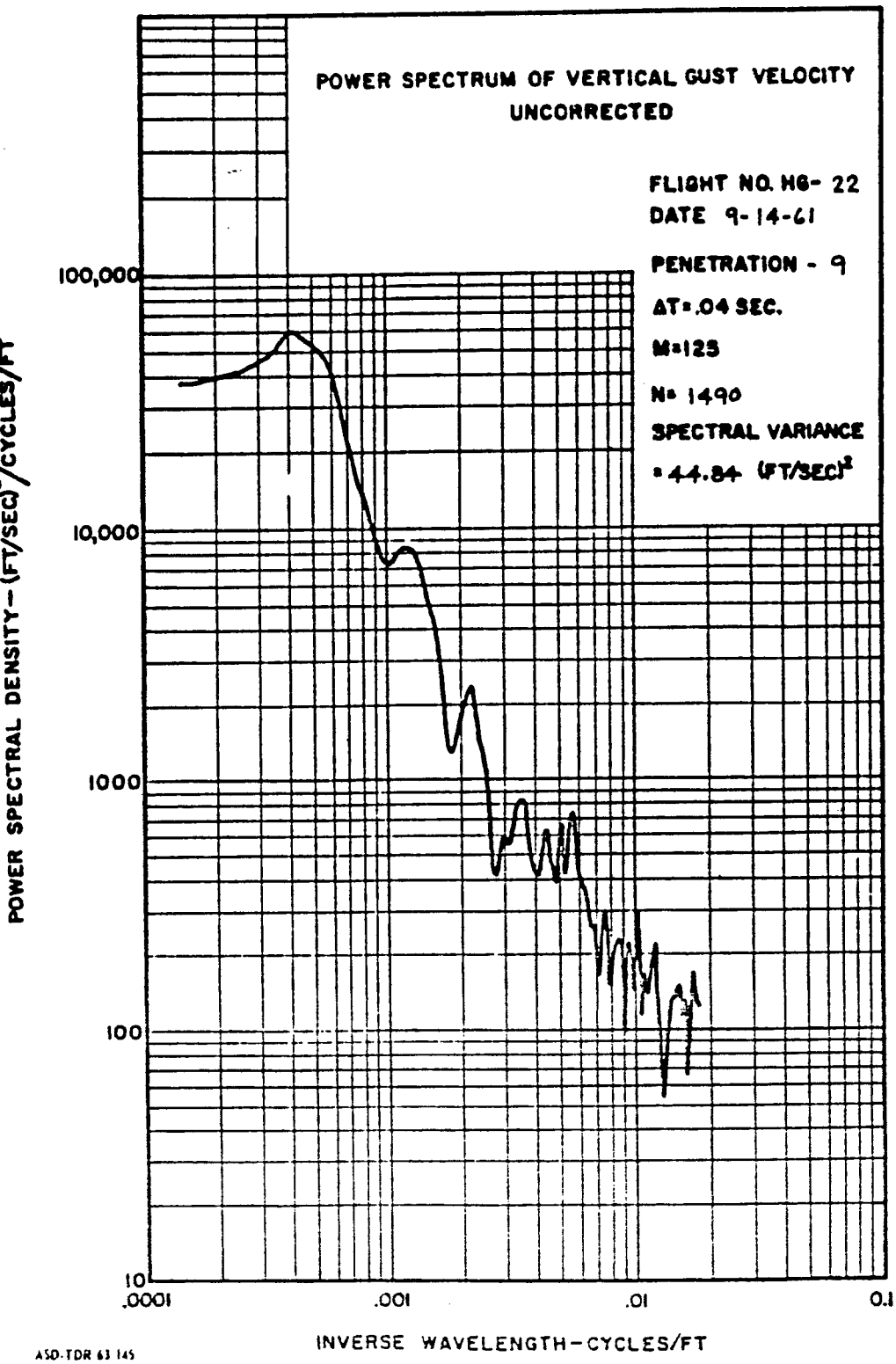

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 2610
SPECTRAL VARIANCE
= 13.75 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

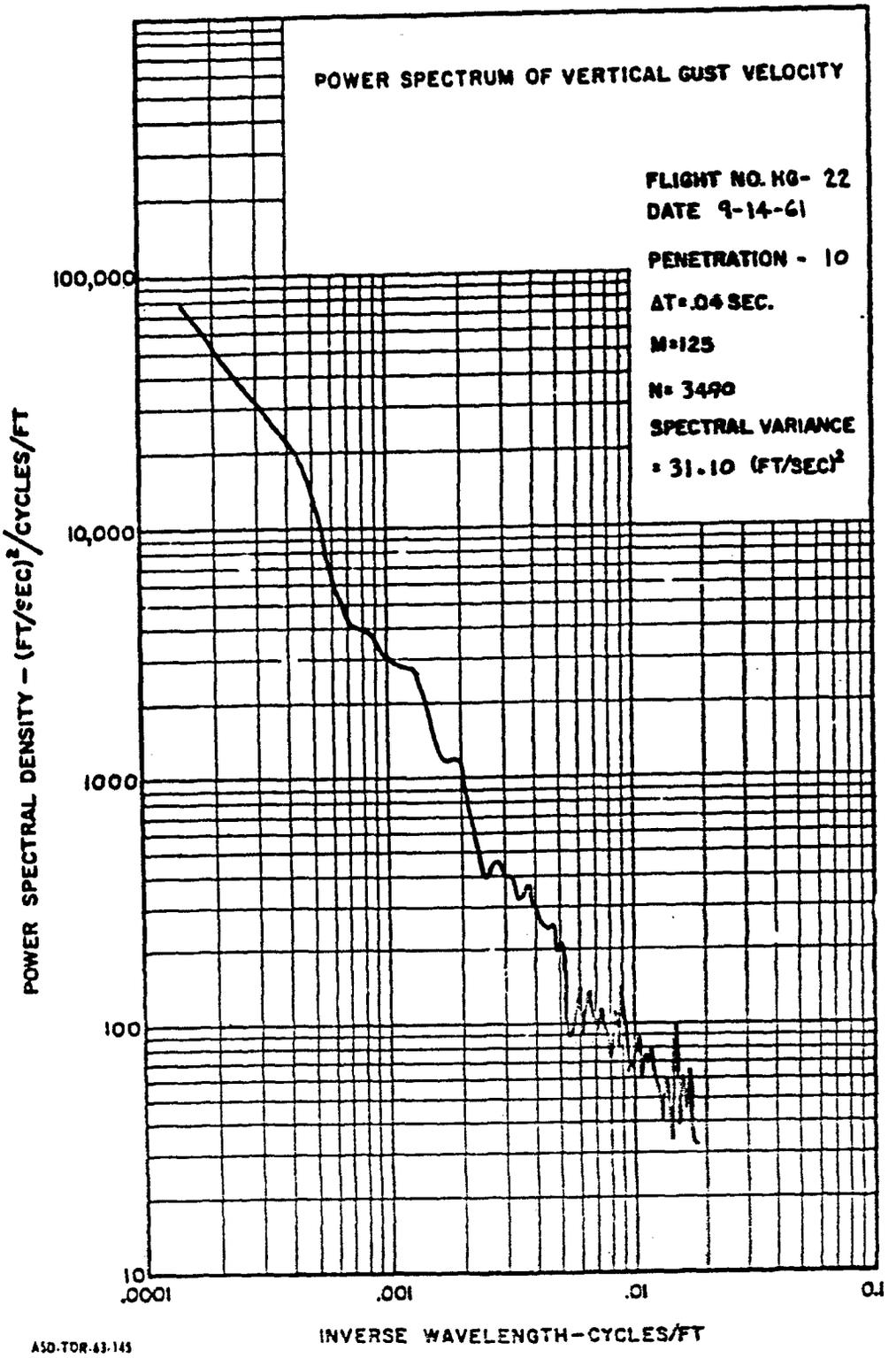

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 2610
SPECTRAL VARIANCE
= 51.80 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

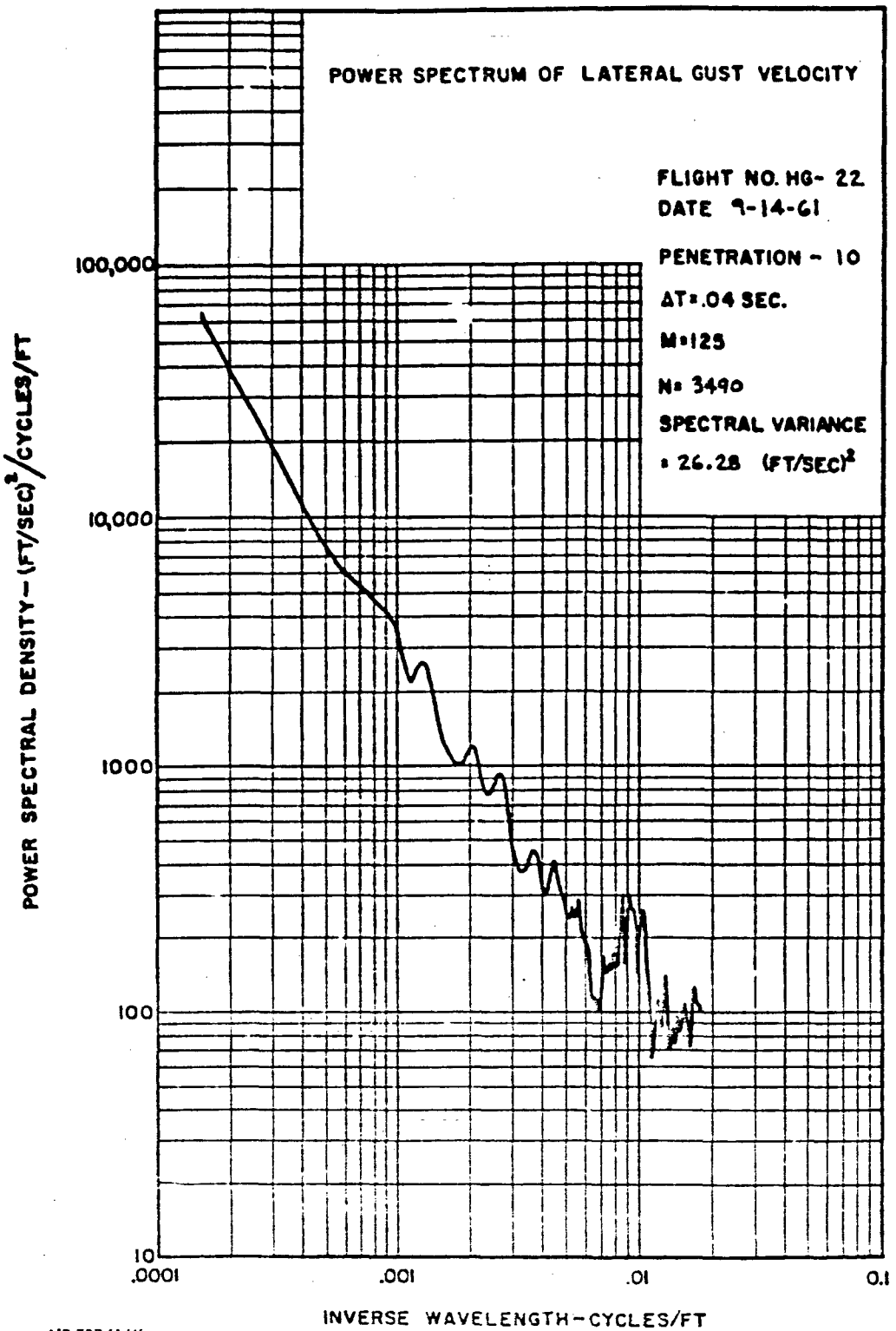

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 99.54 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

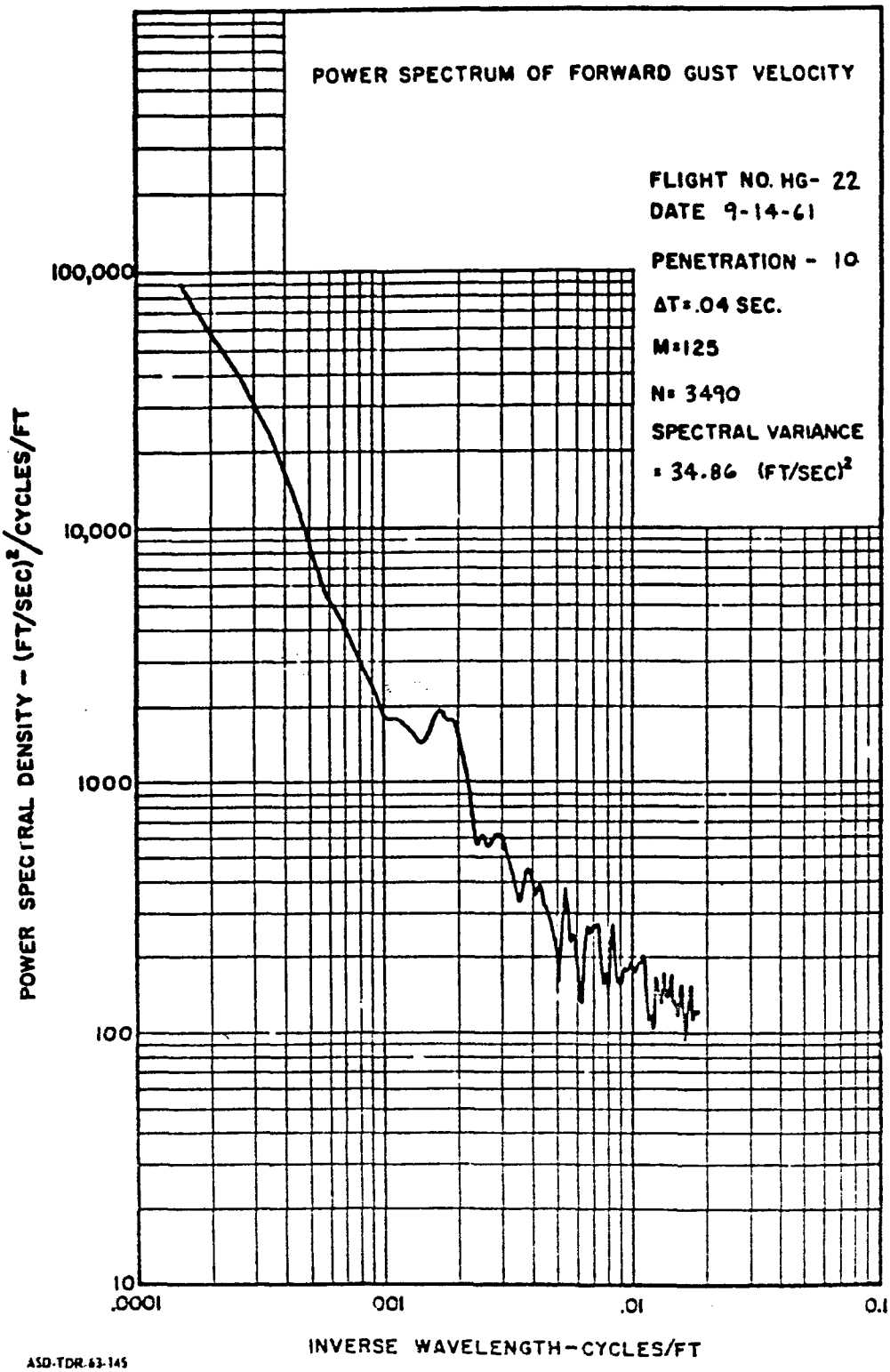

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 75.29 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

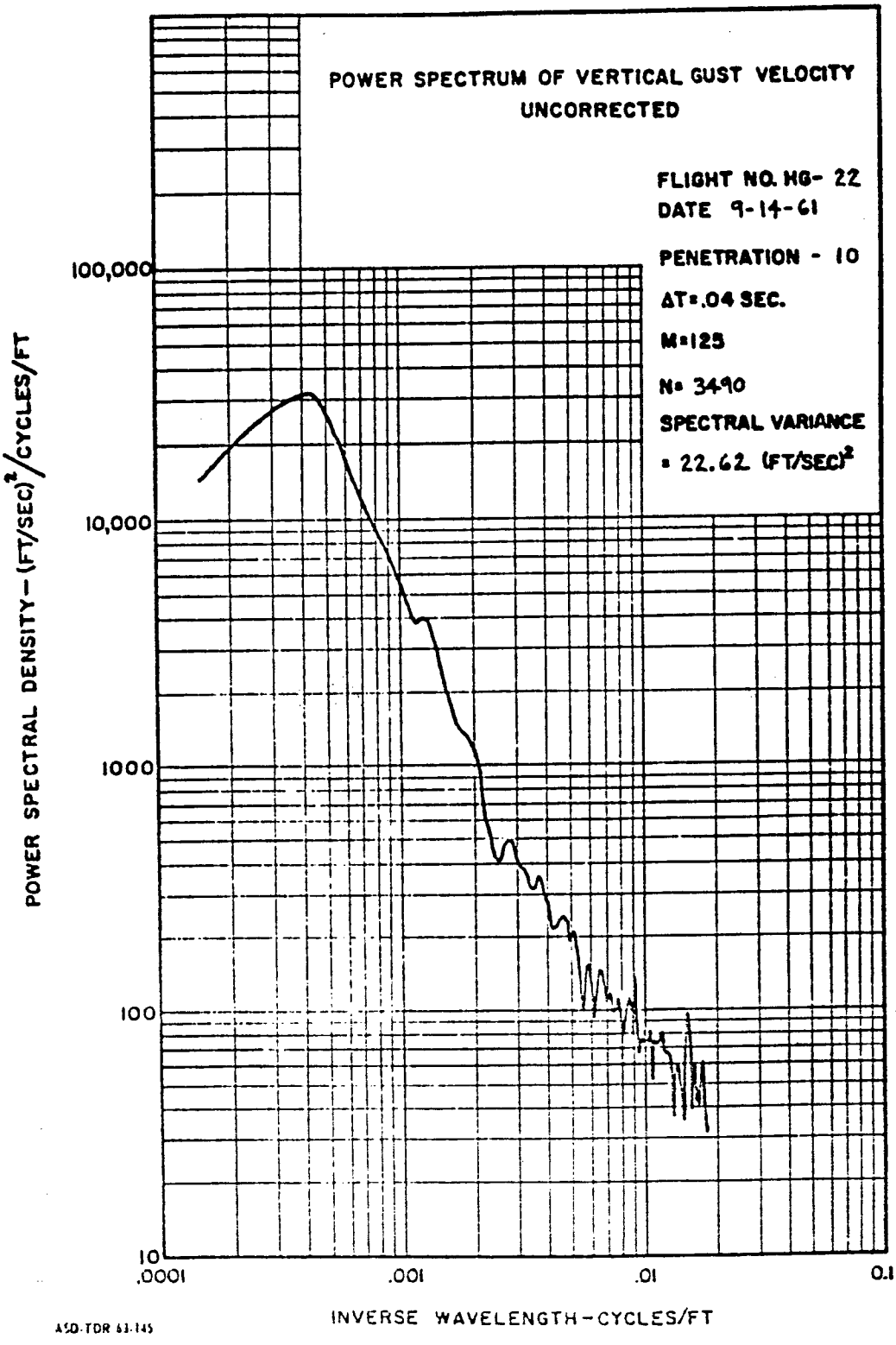

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 22
DATE 9-14-6.
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 61.00 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

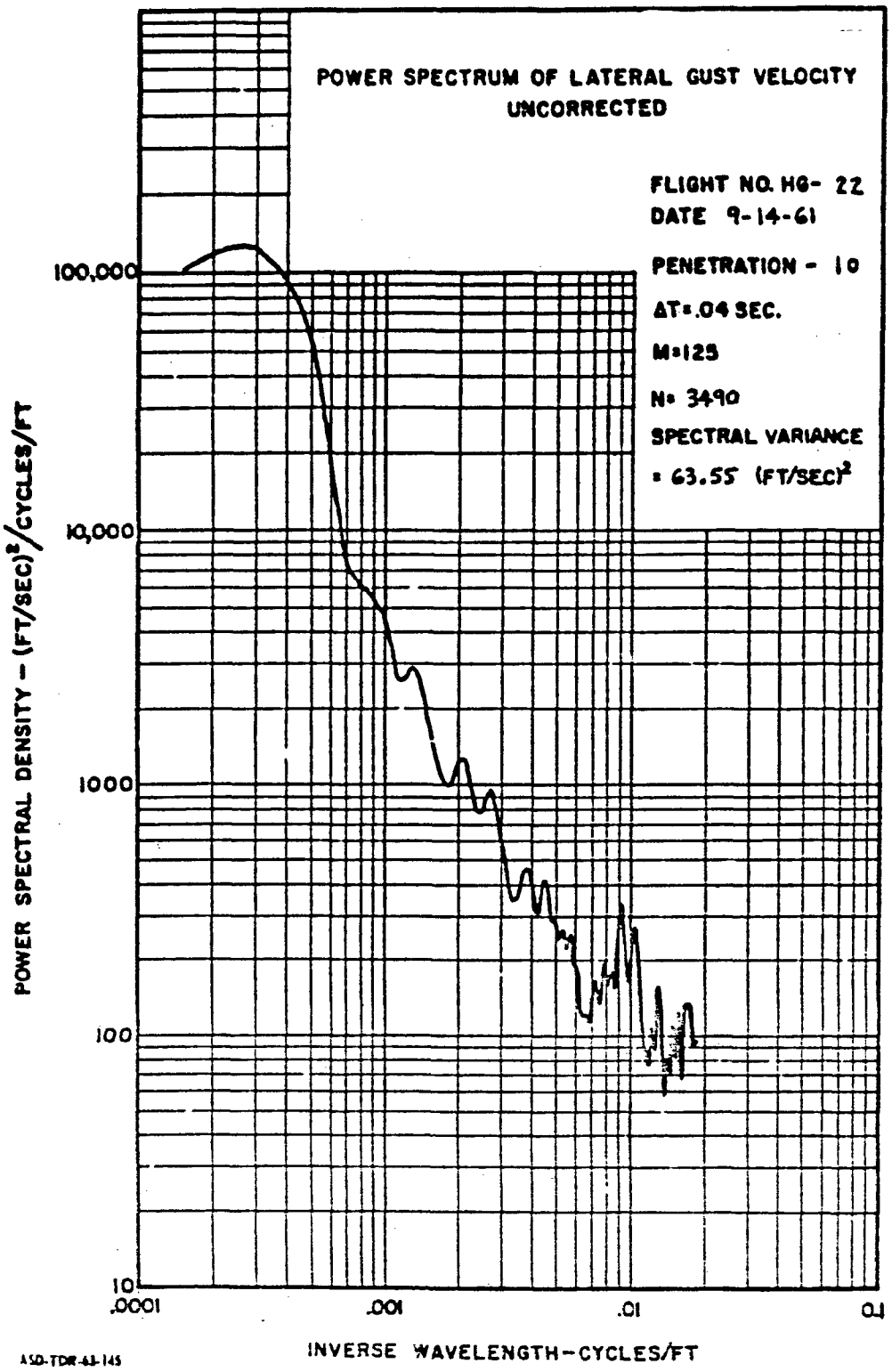

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
=44.84 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

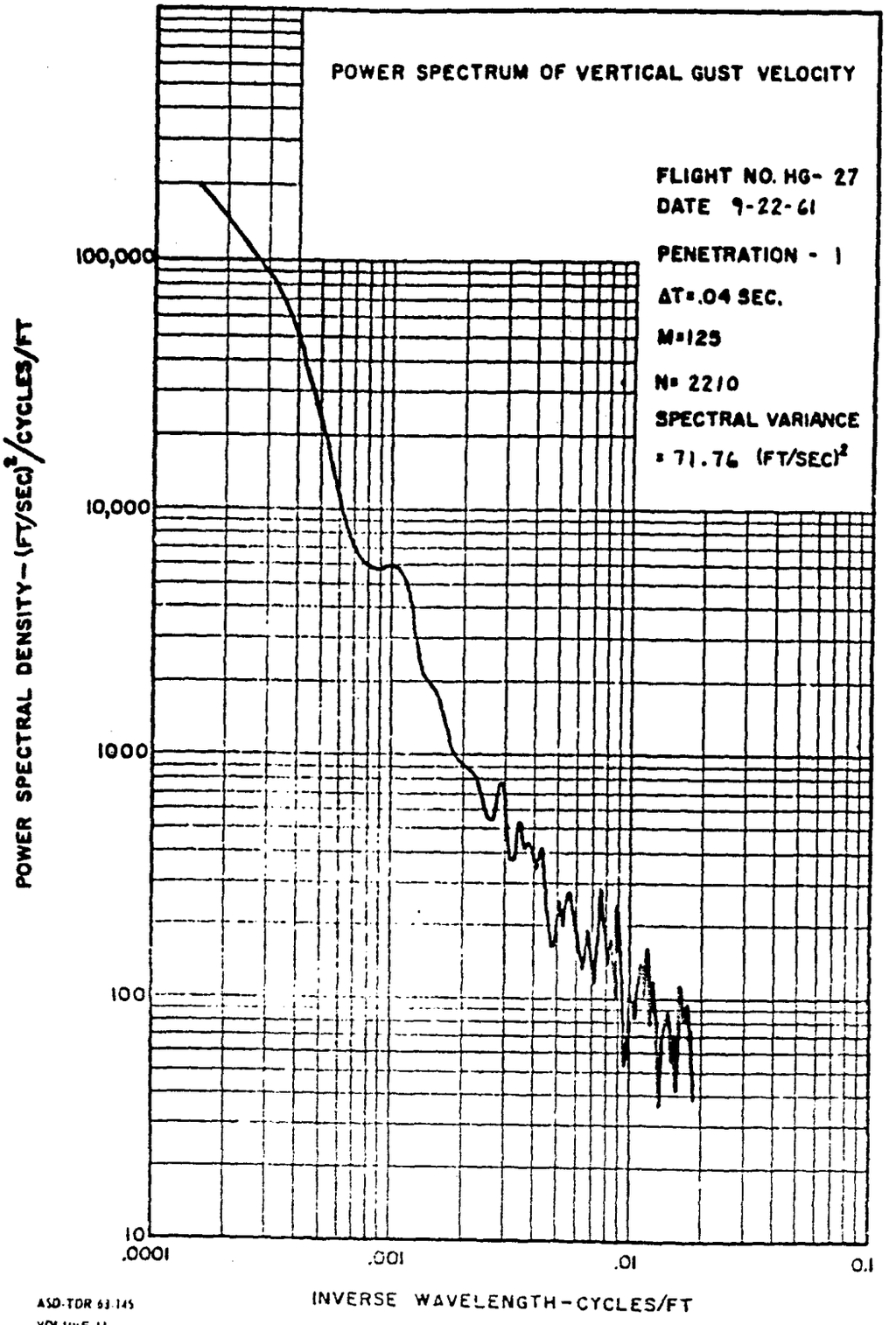

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. KG- 22
DATE 9-14-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 3490
SPECTRAL VARIANCE
= 31.10 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

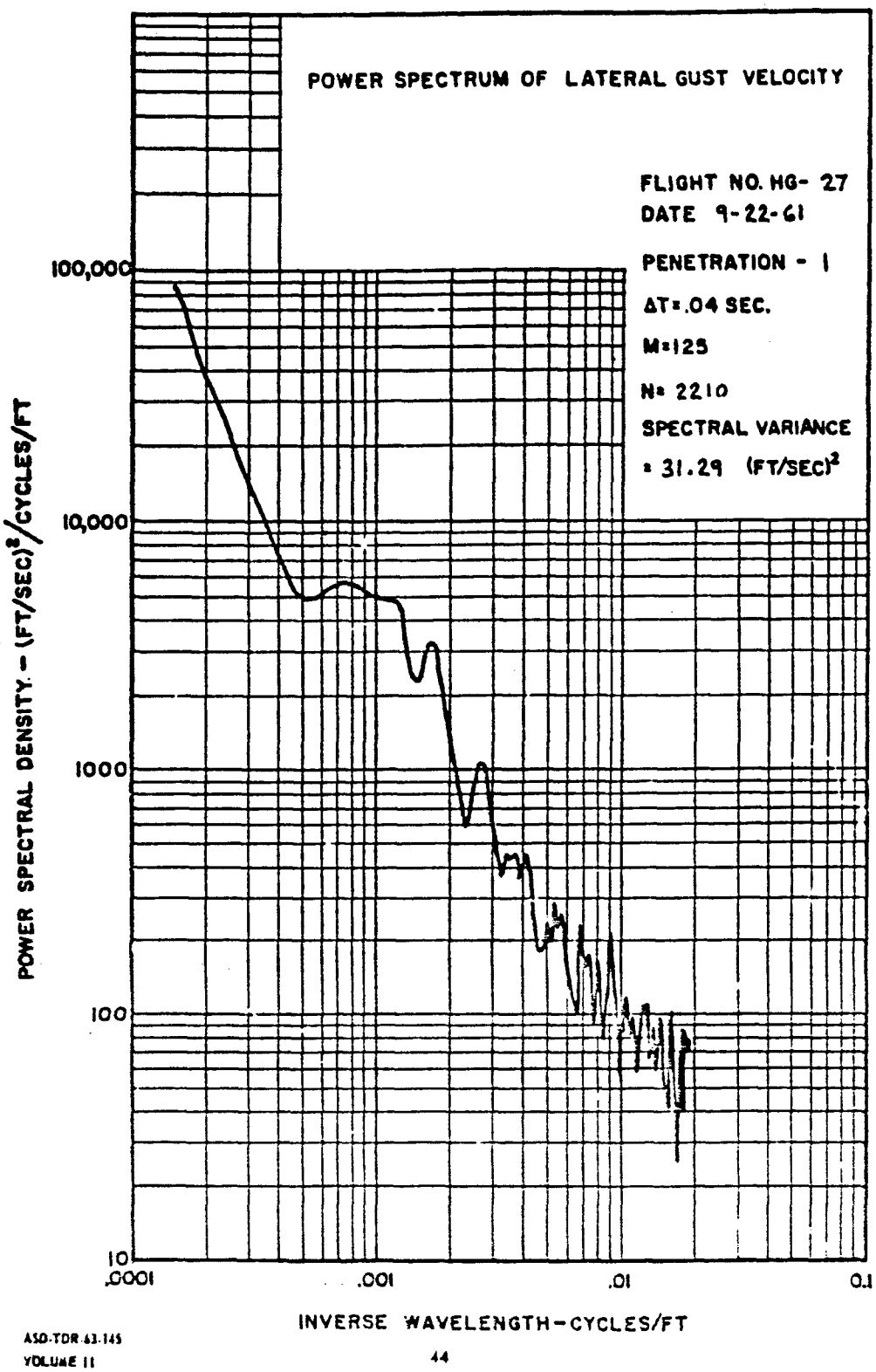

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 3490
SPECTRAL VARIANCE
= 26.28 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

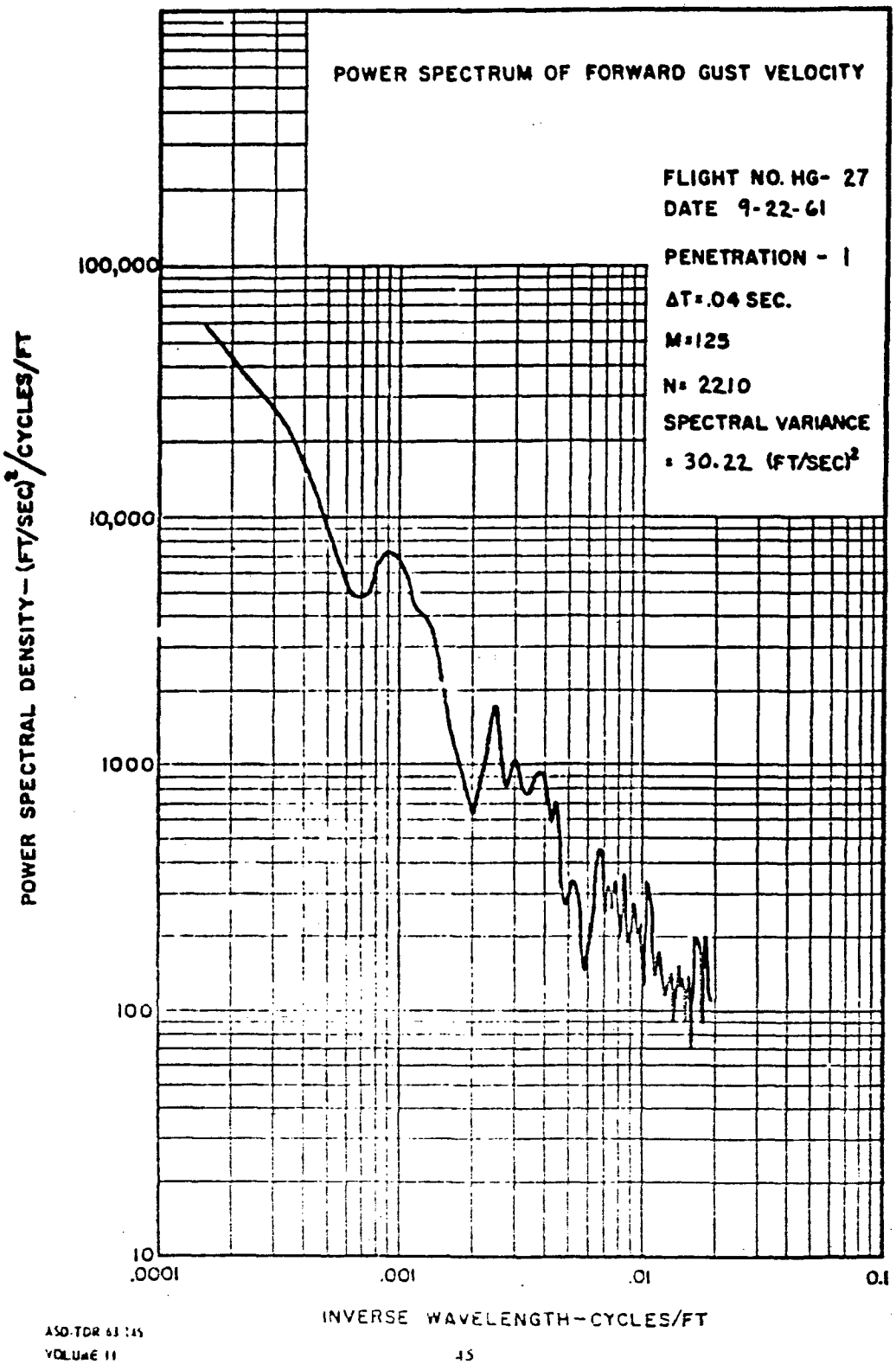

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 3490
SPECTRAL VARIANCE
= 34.86 (FT/SEC)²
100,000
10,000
1000
100
10
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
.0001
001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

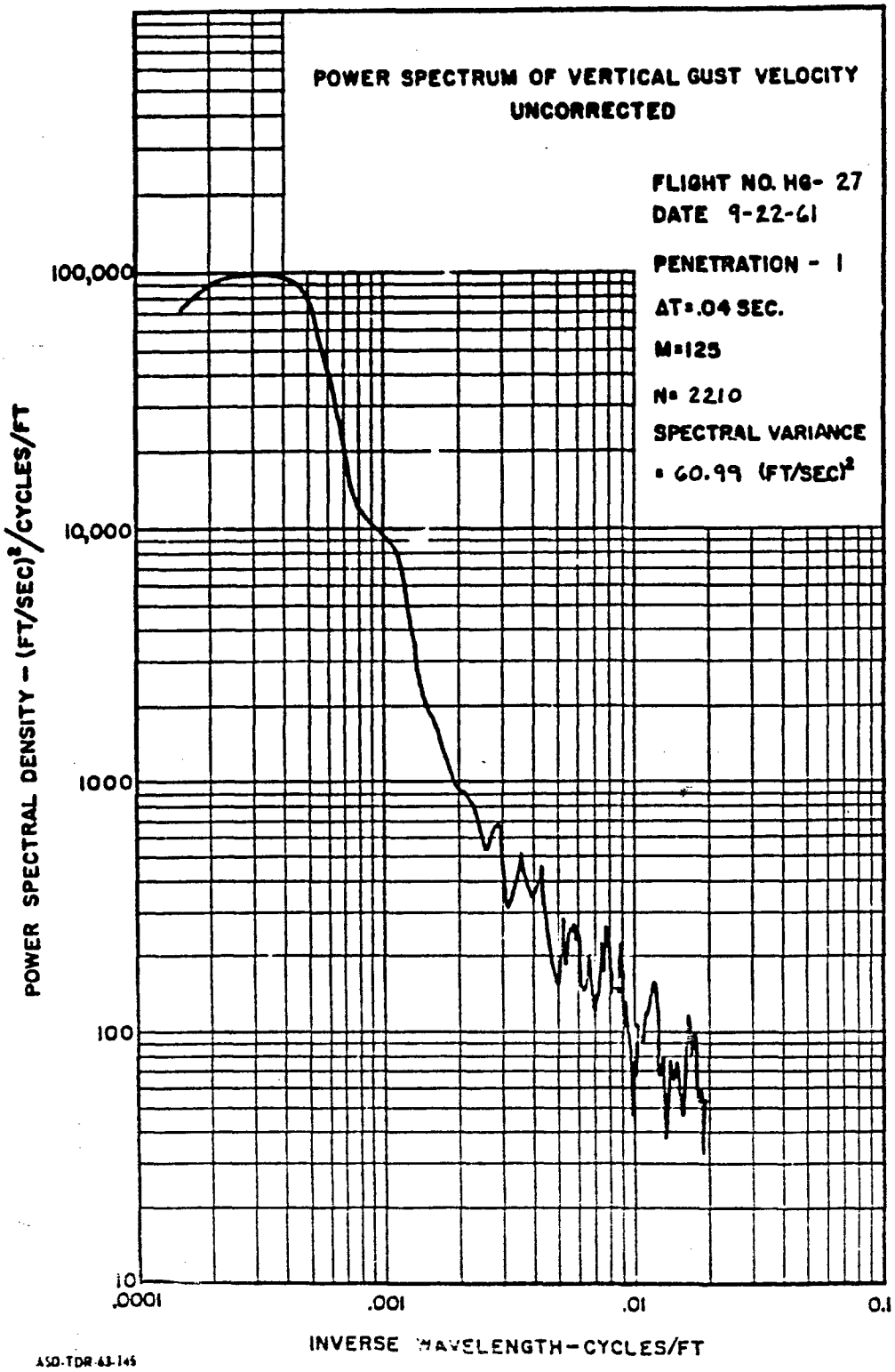

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 3490
SPECTRAL VARIANCE
= 22.62 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

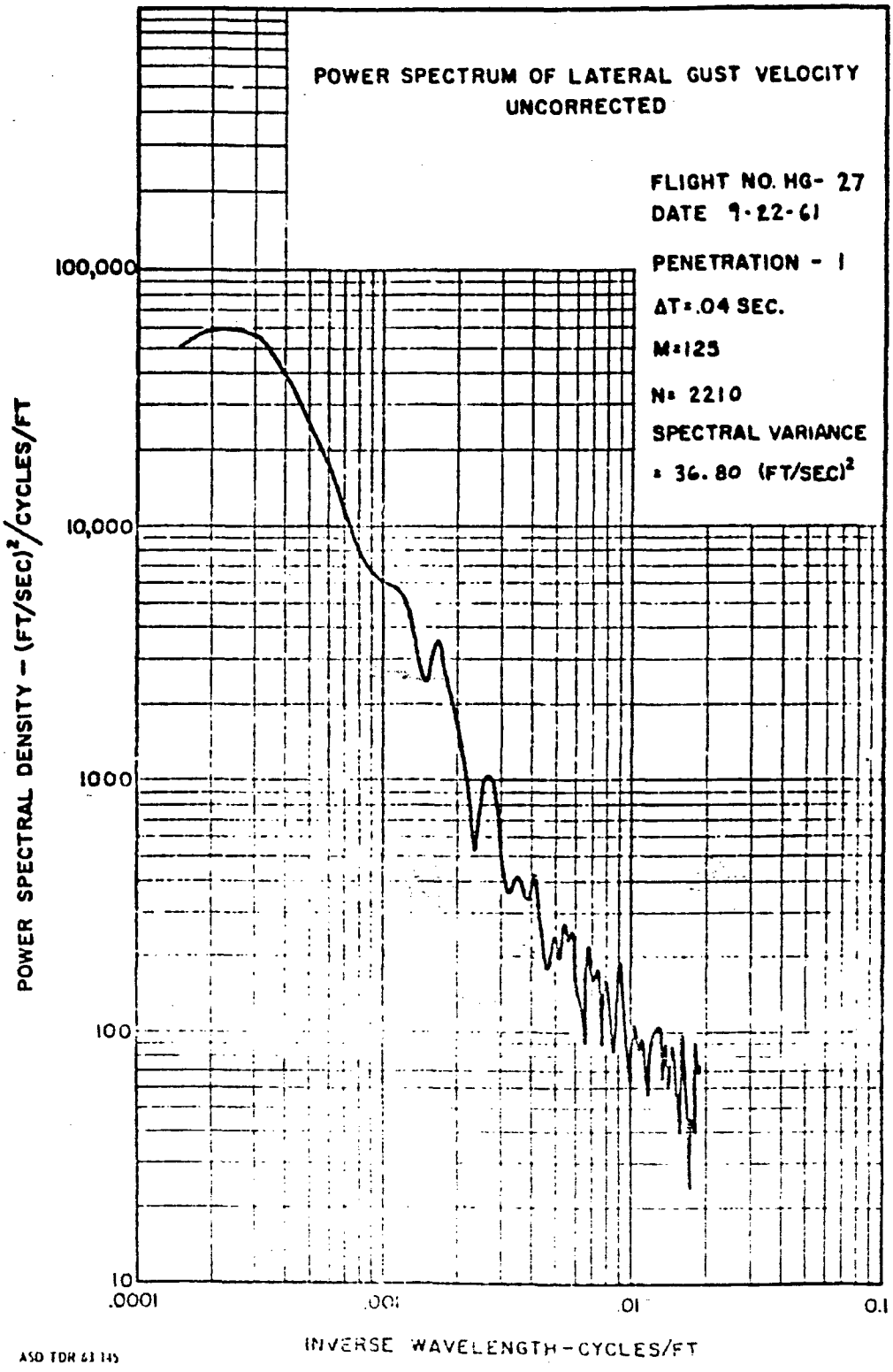

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 22
DATE 9-14-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 3490
SPECTRAL VARIANCE
= 63.55 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

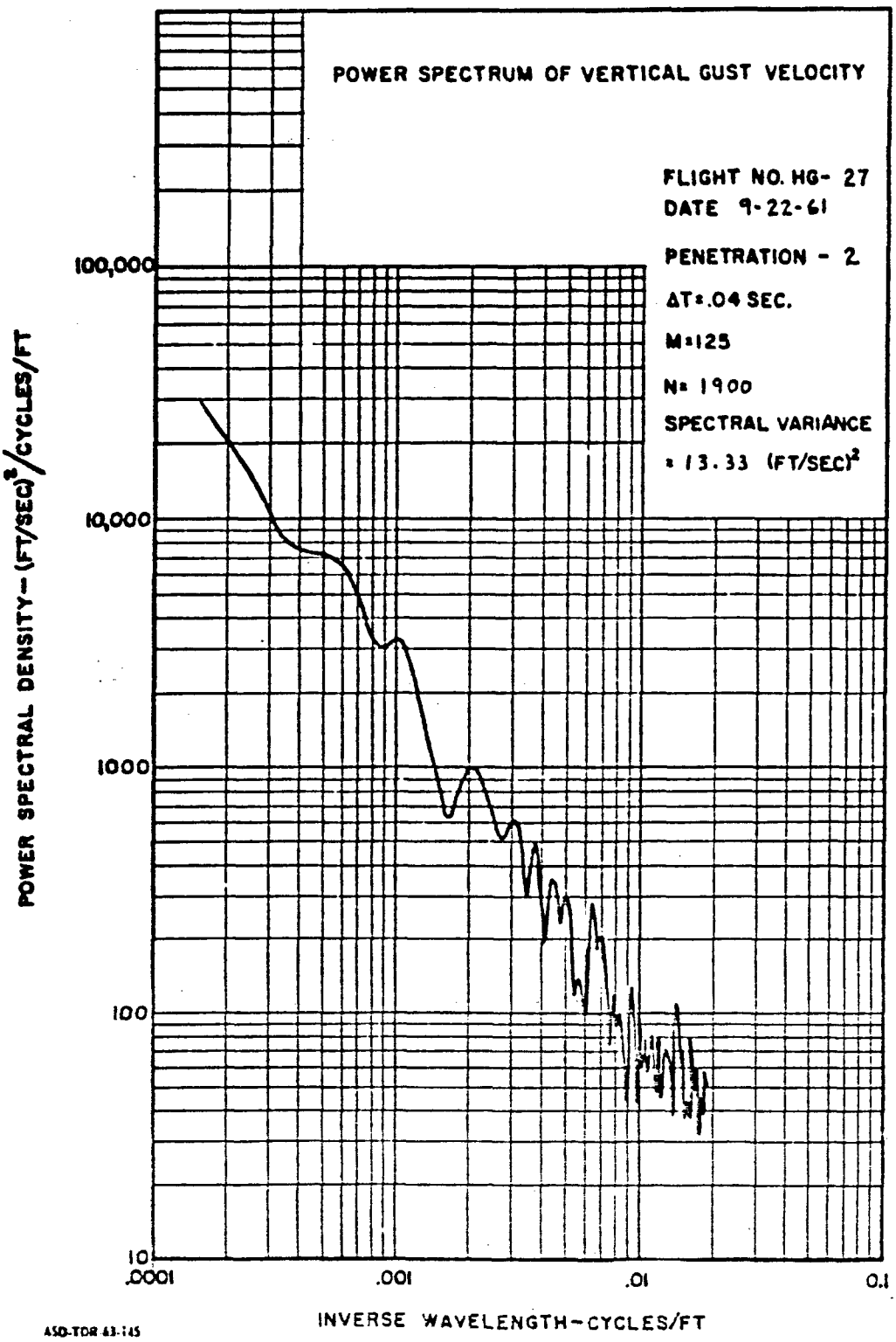

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2210
SPECTRAL VARIANCE
= 71.76 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

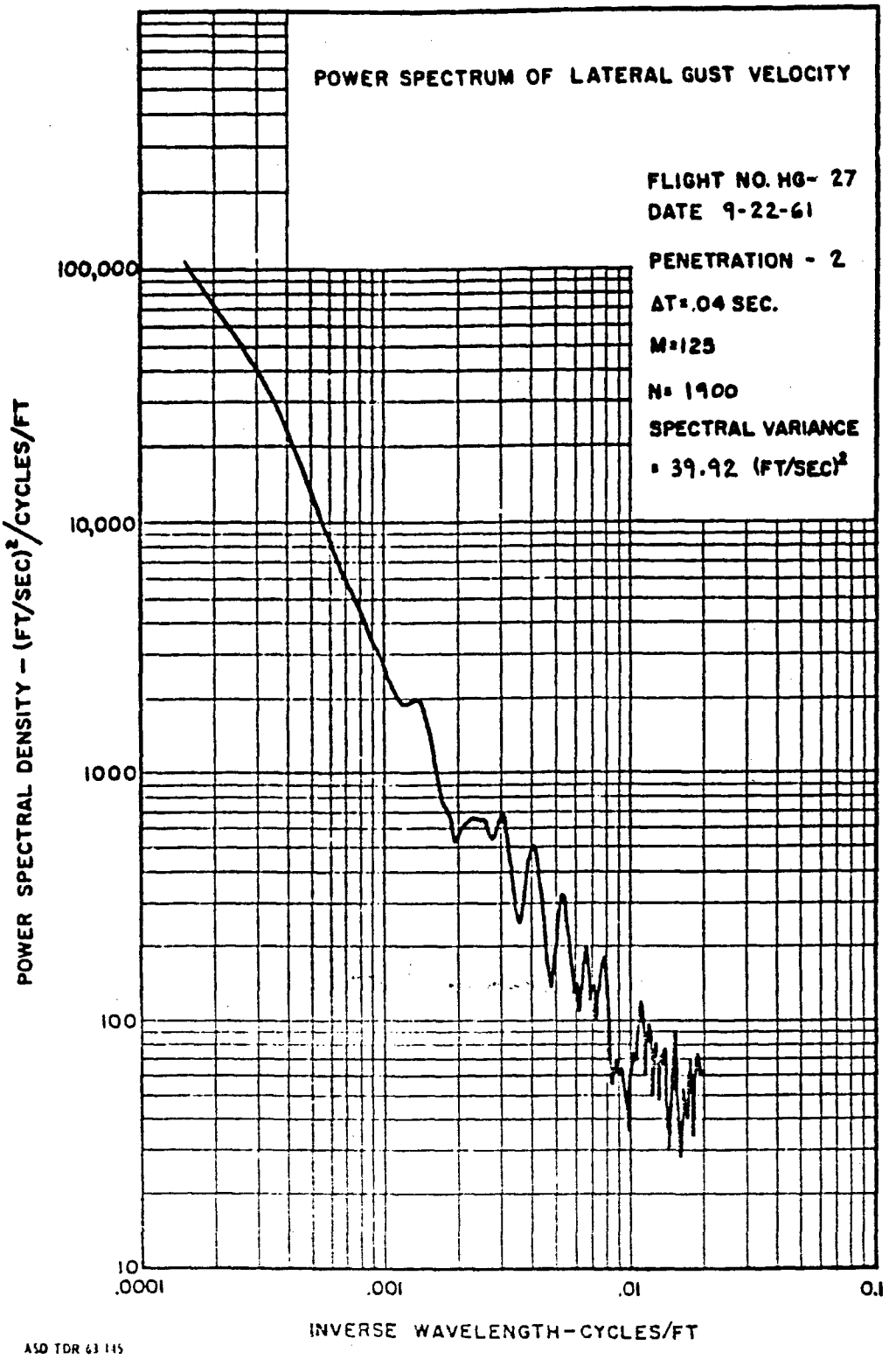

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2210
SPECTRAL VARIANCE
= 31.29 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

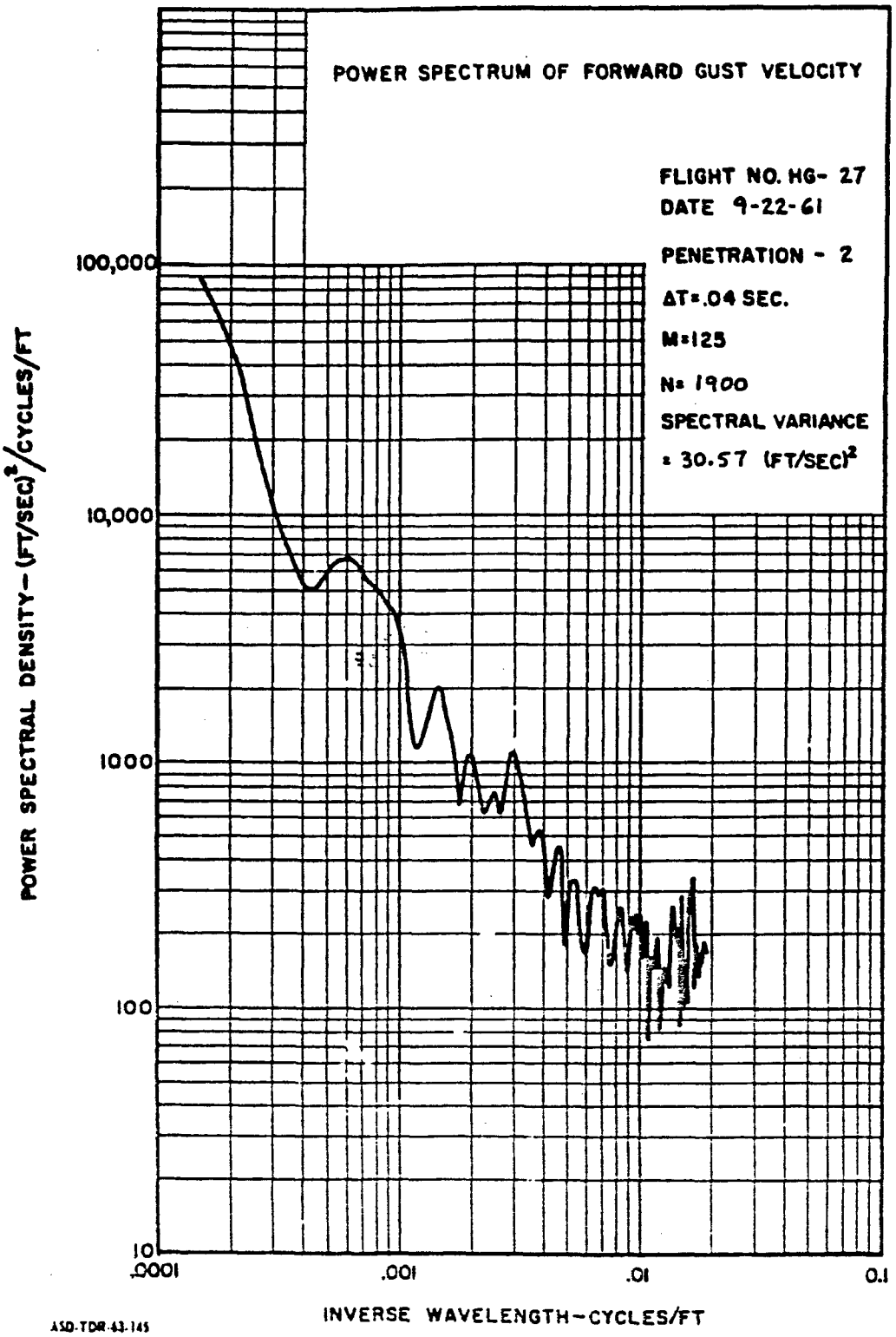

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2210
SPECTRAL VARIANCE
= 30.22 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

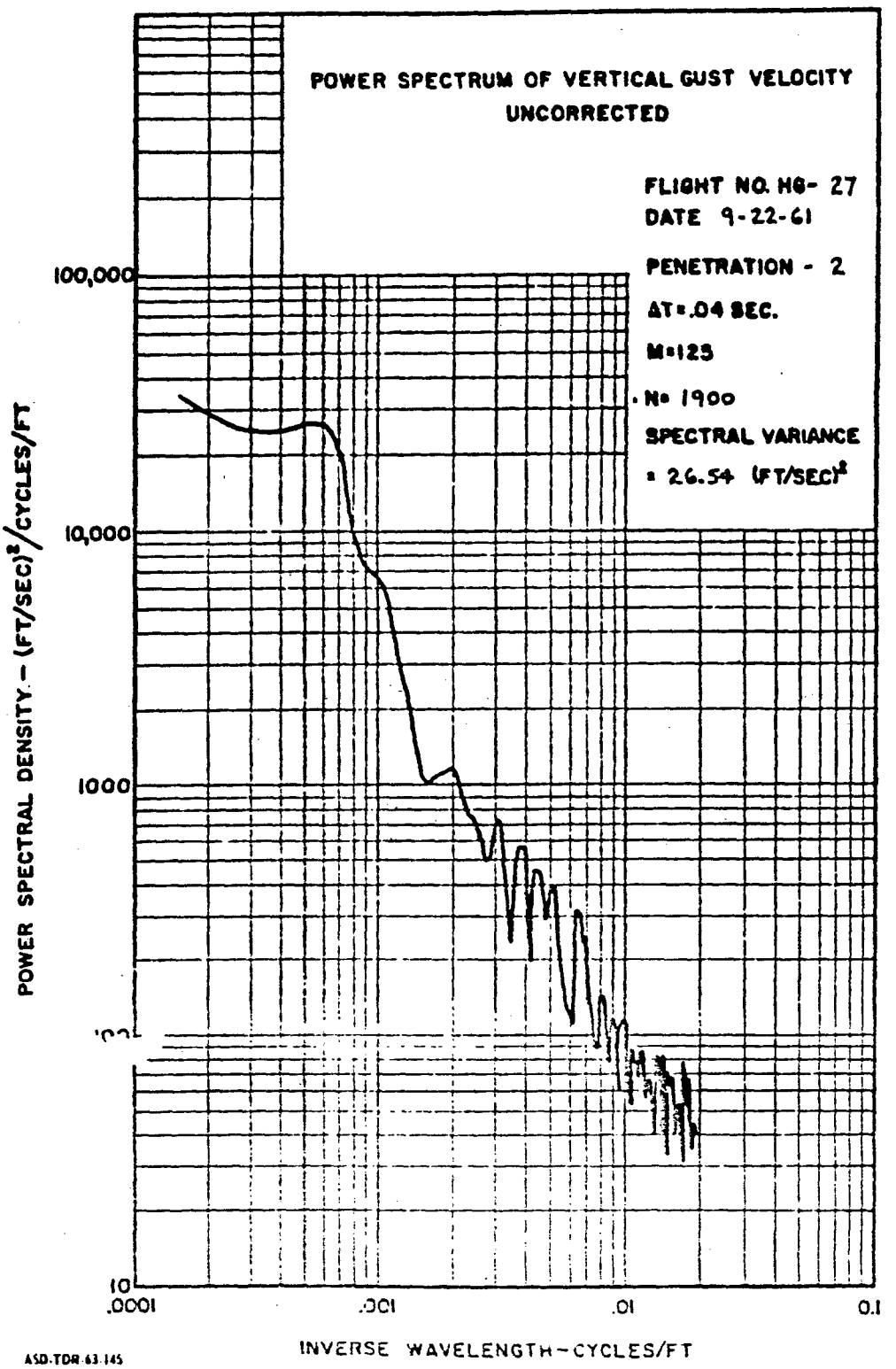

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2210
SPECTRAL VARIANCE
= 60.99 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

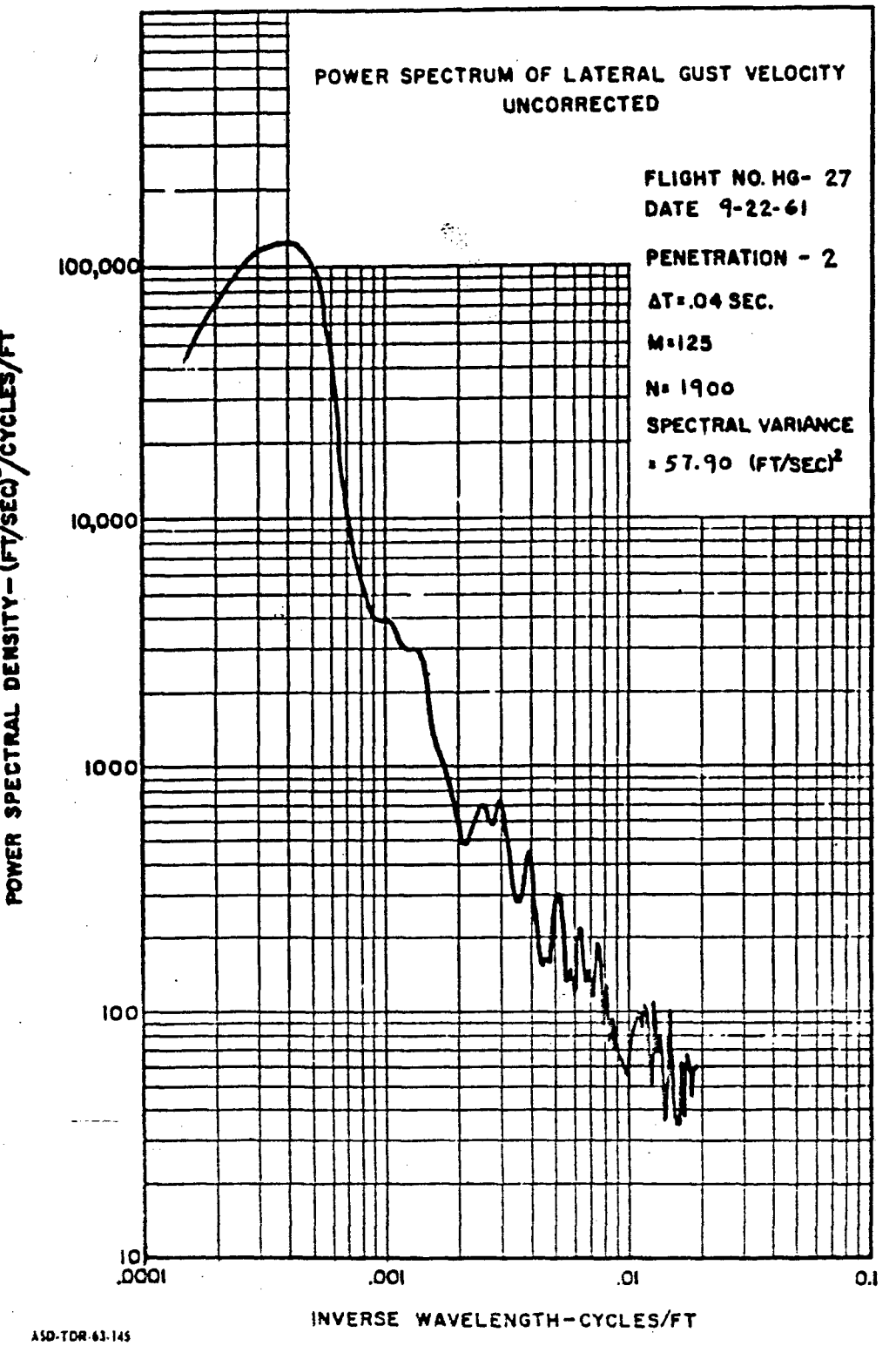

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2210
SPECTRAL VARIANCE
= 36.80 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

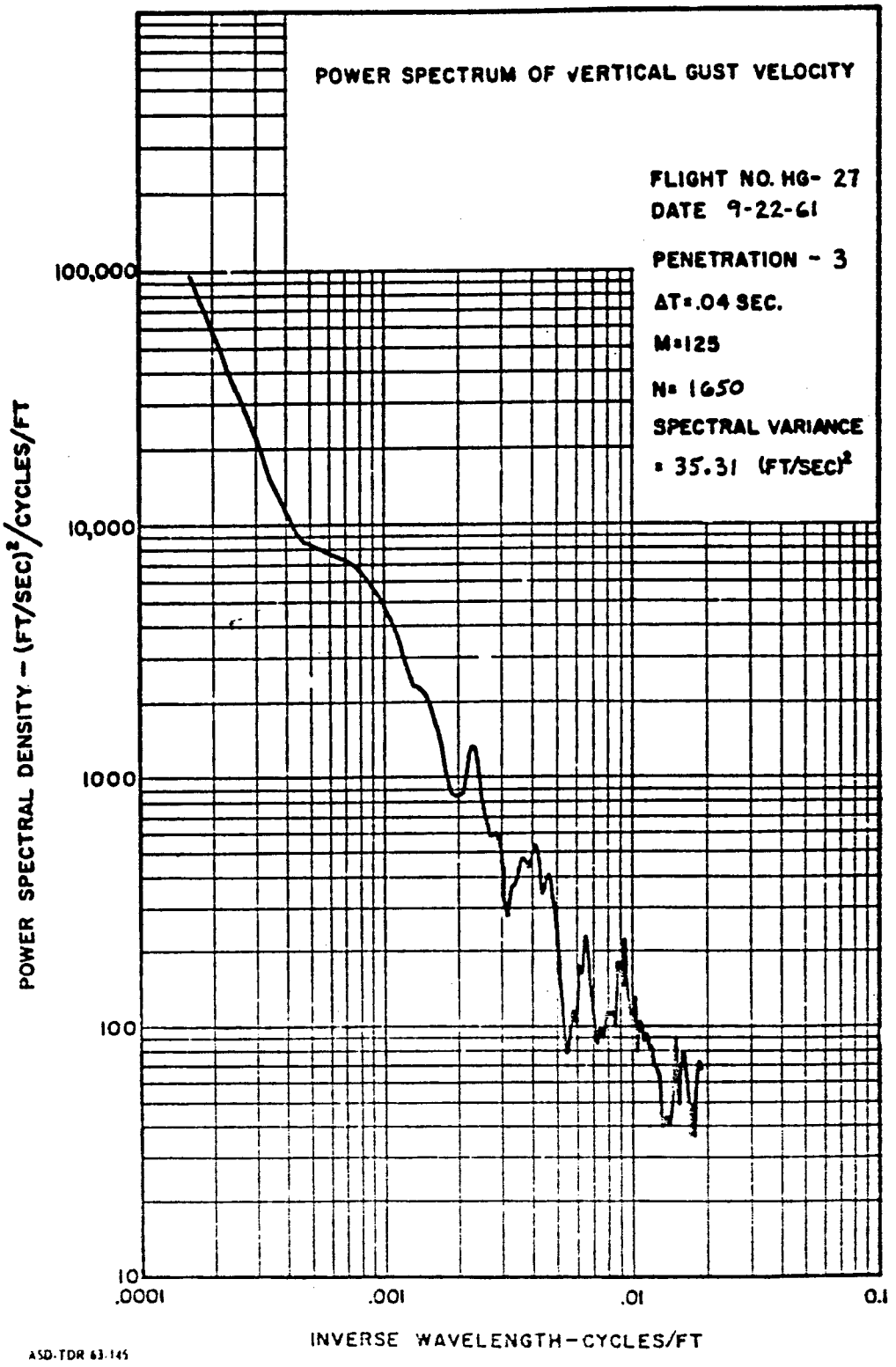

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 1900
SPECTRAL VARIANCE
= 13.33 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

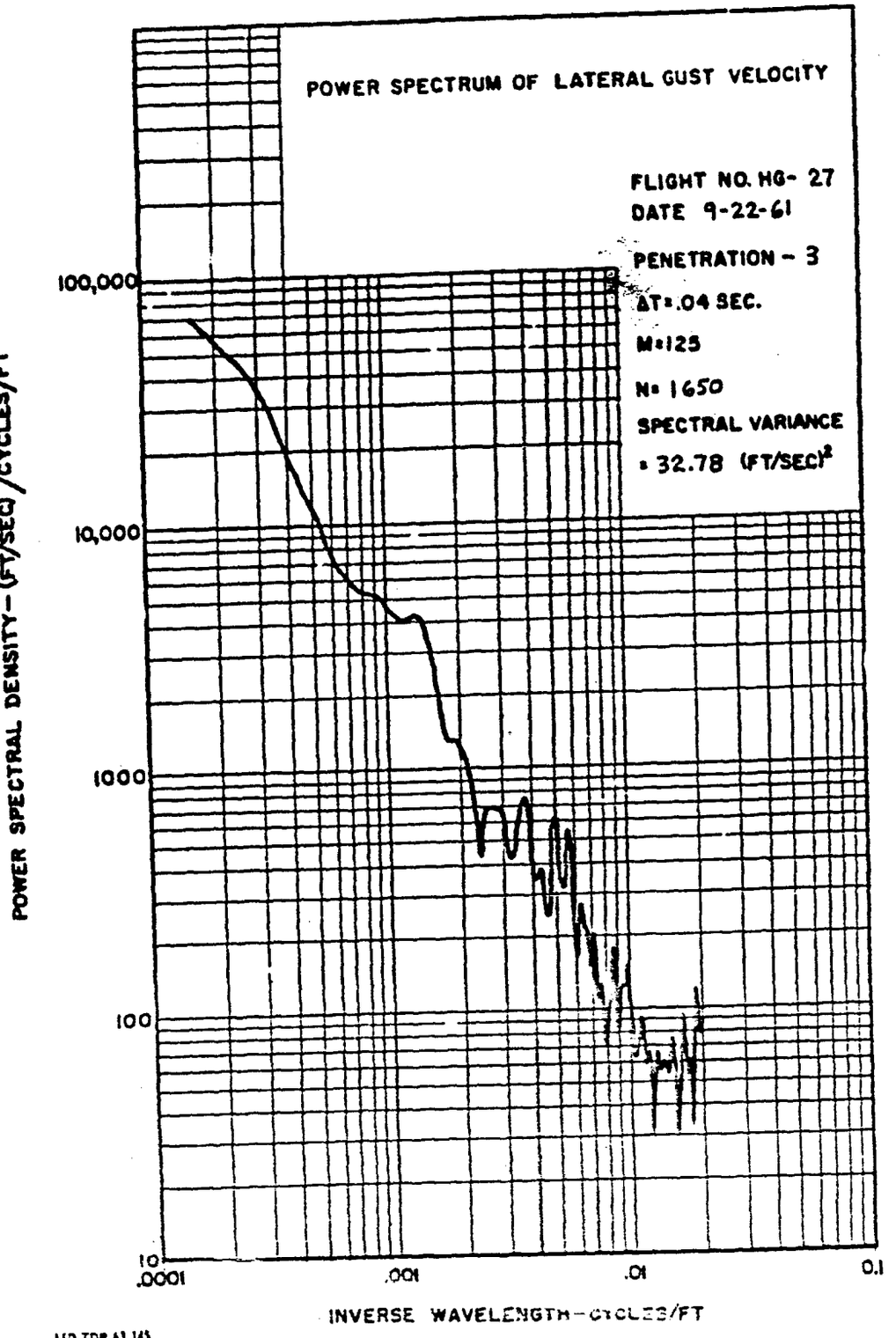

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 1900
SPECTRAL VARIANCE
= 39.92 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

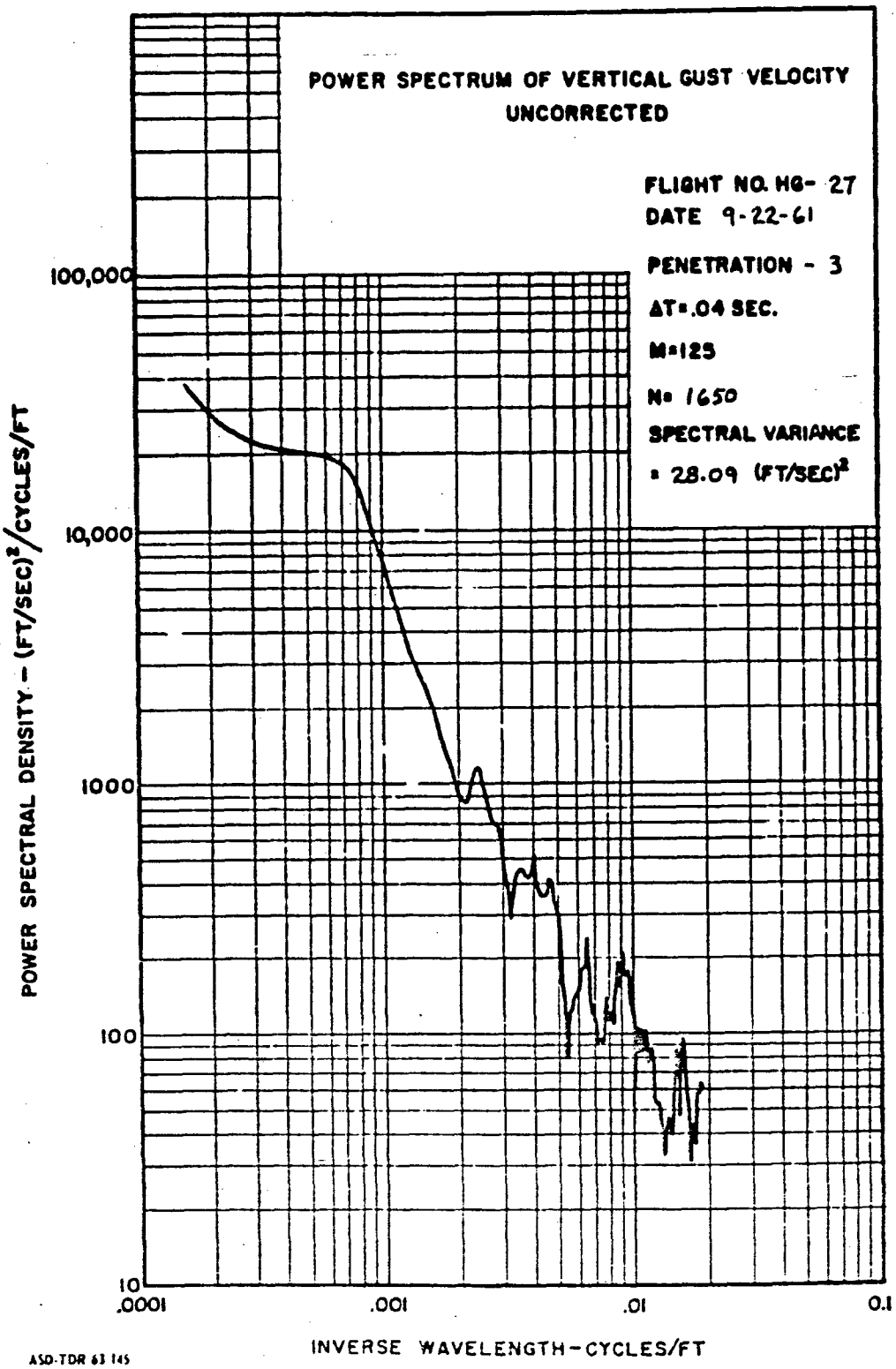

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 1900
SPECTRAL VARIANCE
= 30.57 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

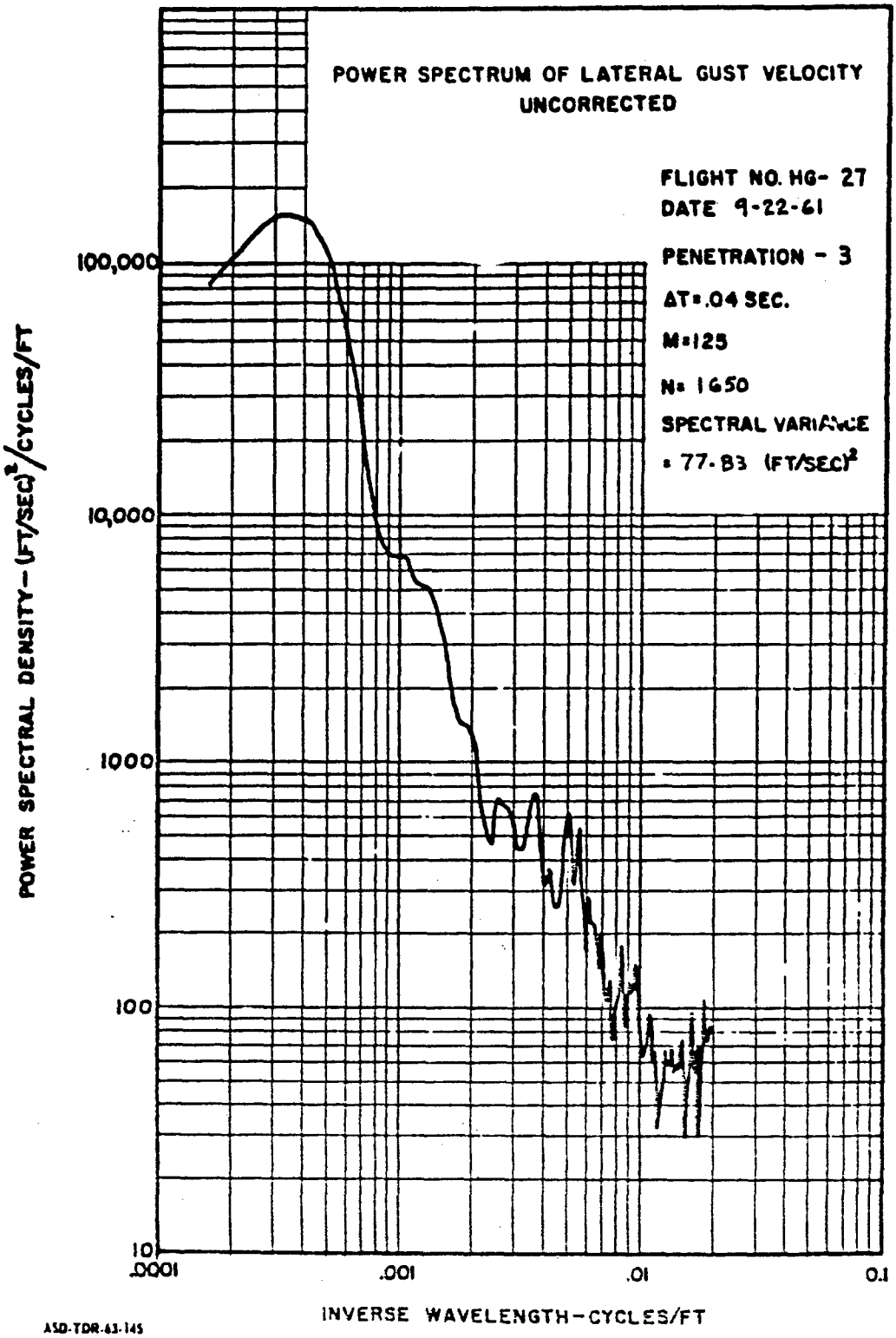

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 27
DATE 9-22-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 1900
SPECTRAL VARIANCE
= 26.54 (FT/SEC)²
100,000
10,000
1000
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

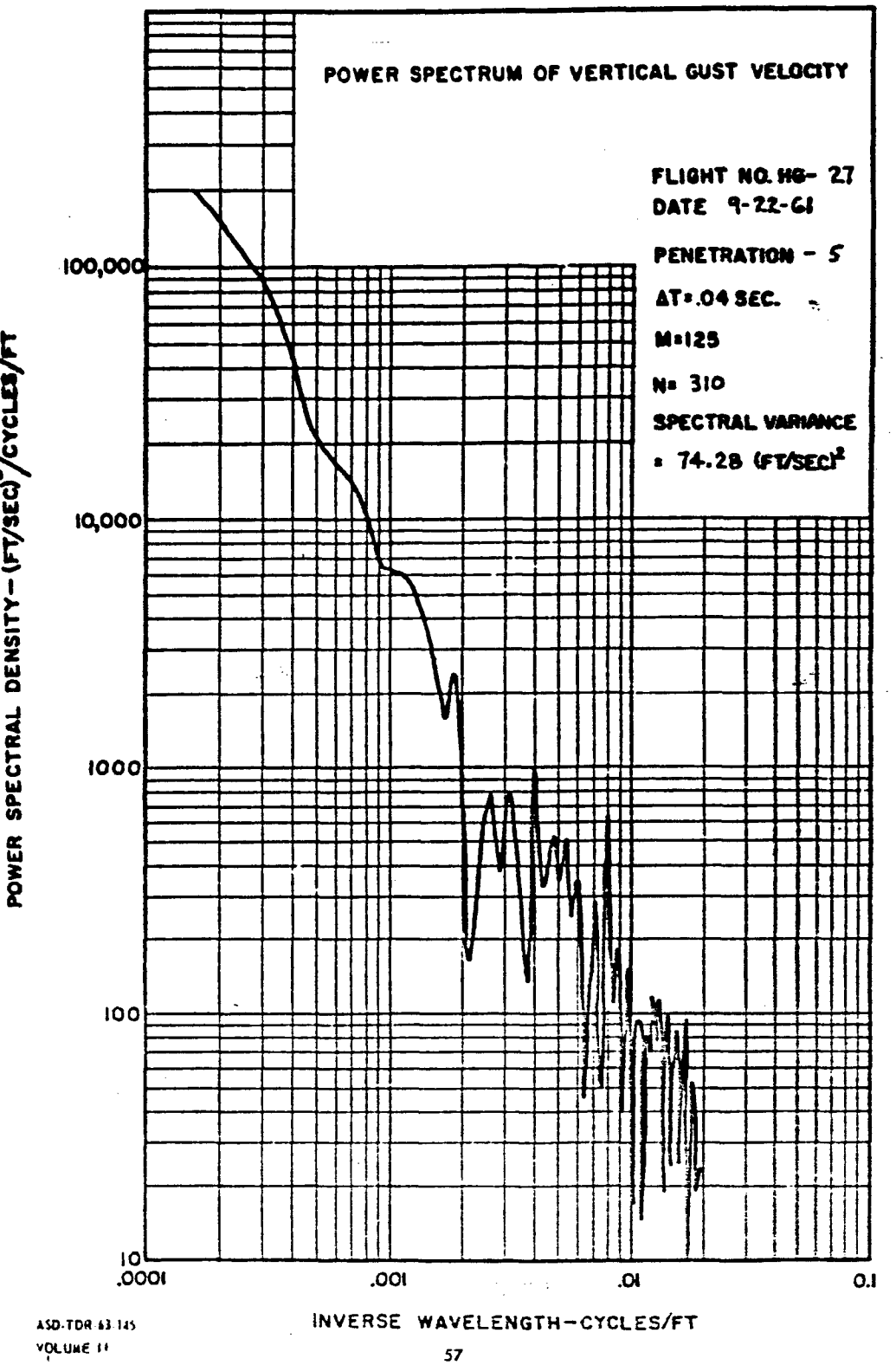

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 1900
SPECTRAL VARIANCE
= 57.90 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

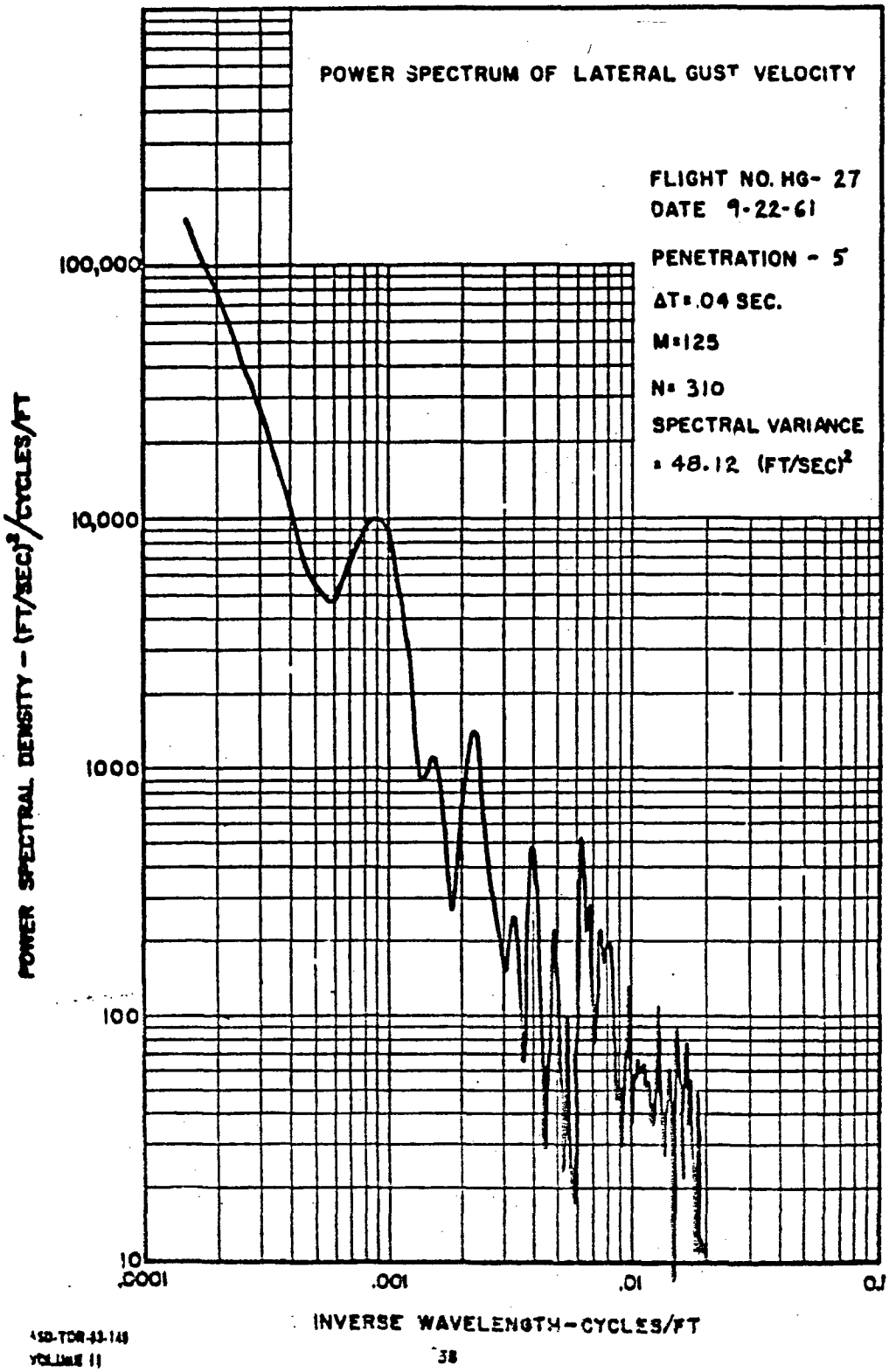

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1650
SPECTRAL VARIANCE
= 35.31 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

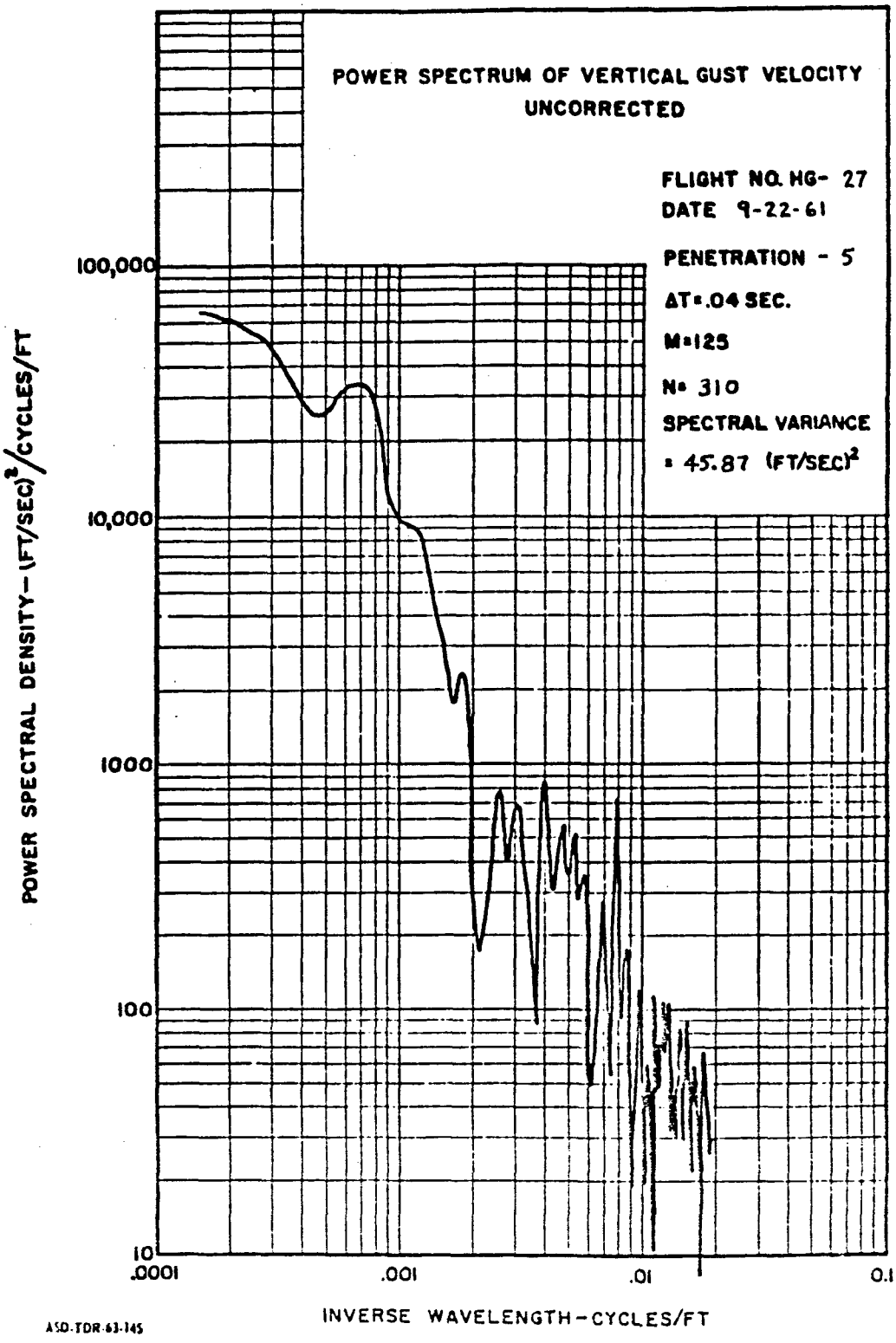

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1650
SPECTRAL VARIANCE
= 32.78 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

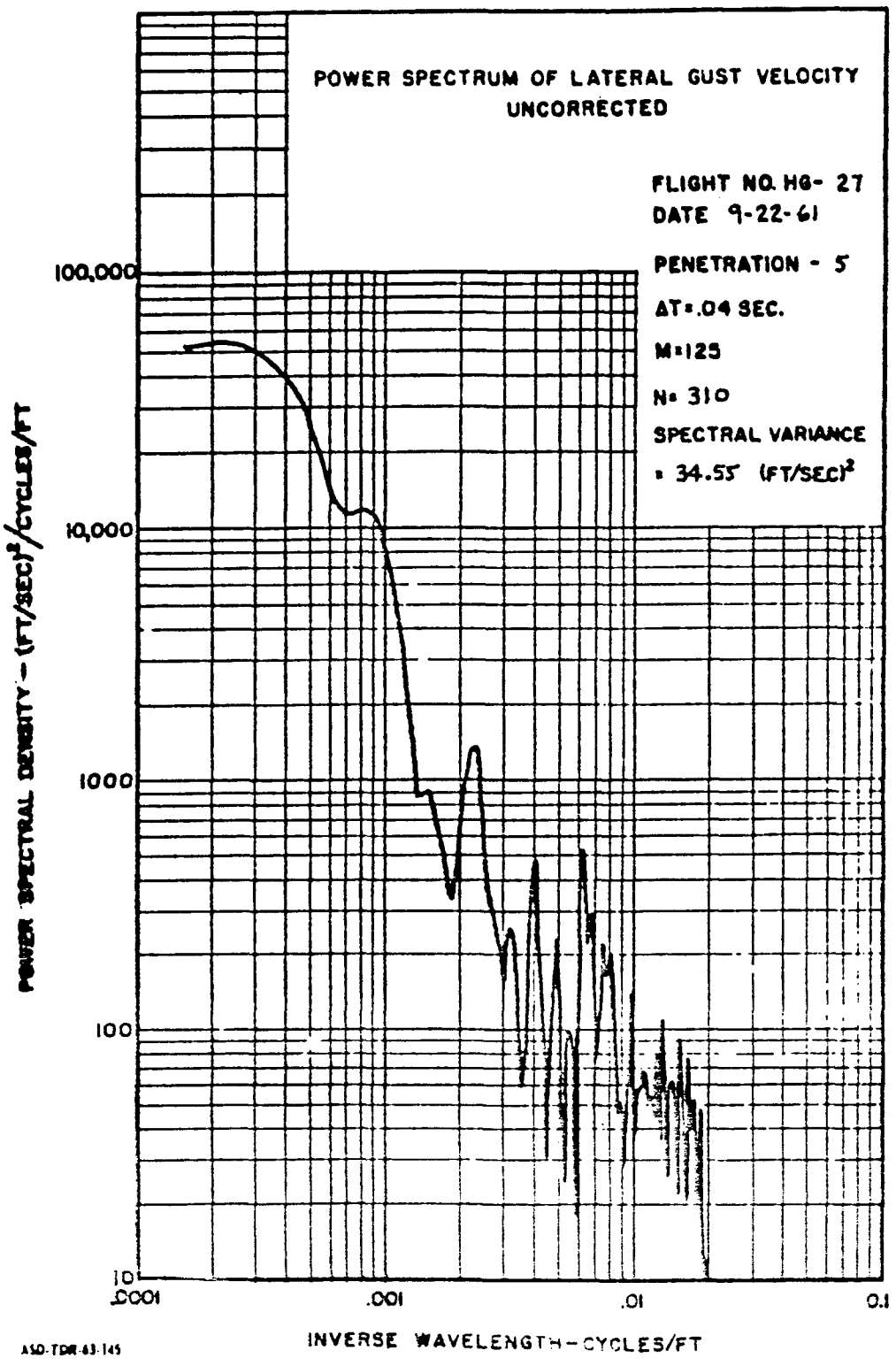

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1650
SPECTRAL VARIANCE
= 28.09 (FT/SEC)²
100,000
10,000
1000
100
10
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

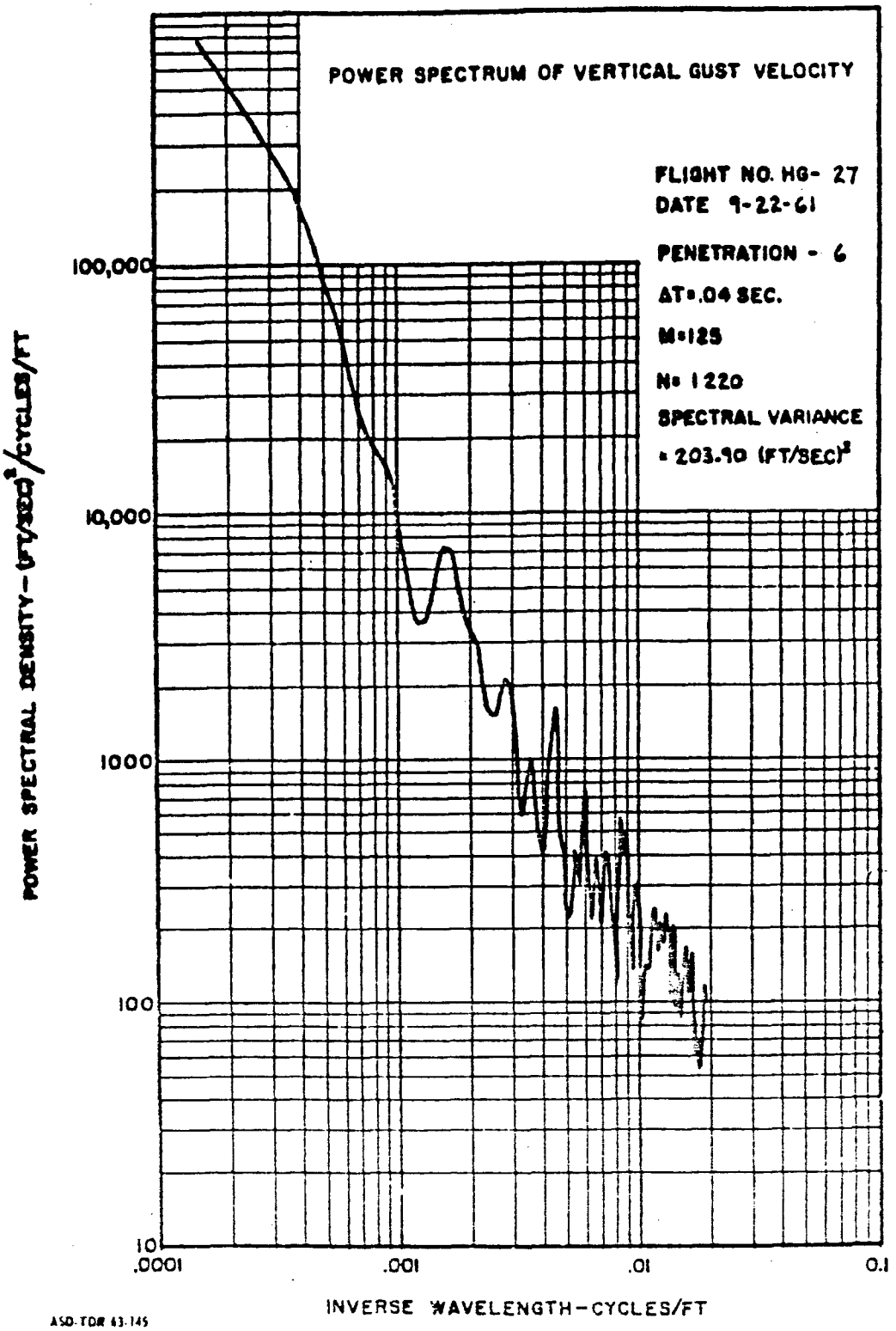

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1650
SPECTRAL VARIANCE
= 77.83 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

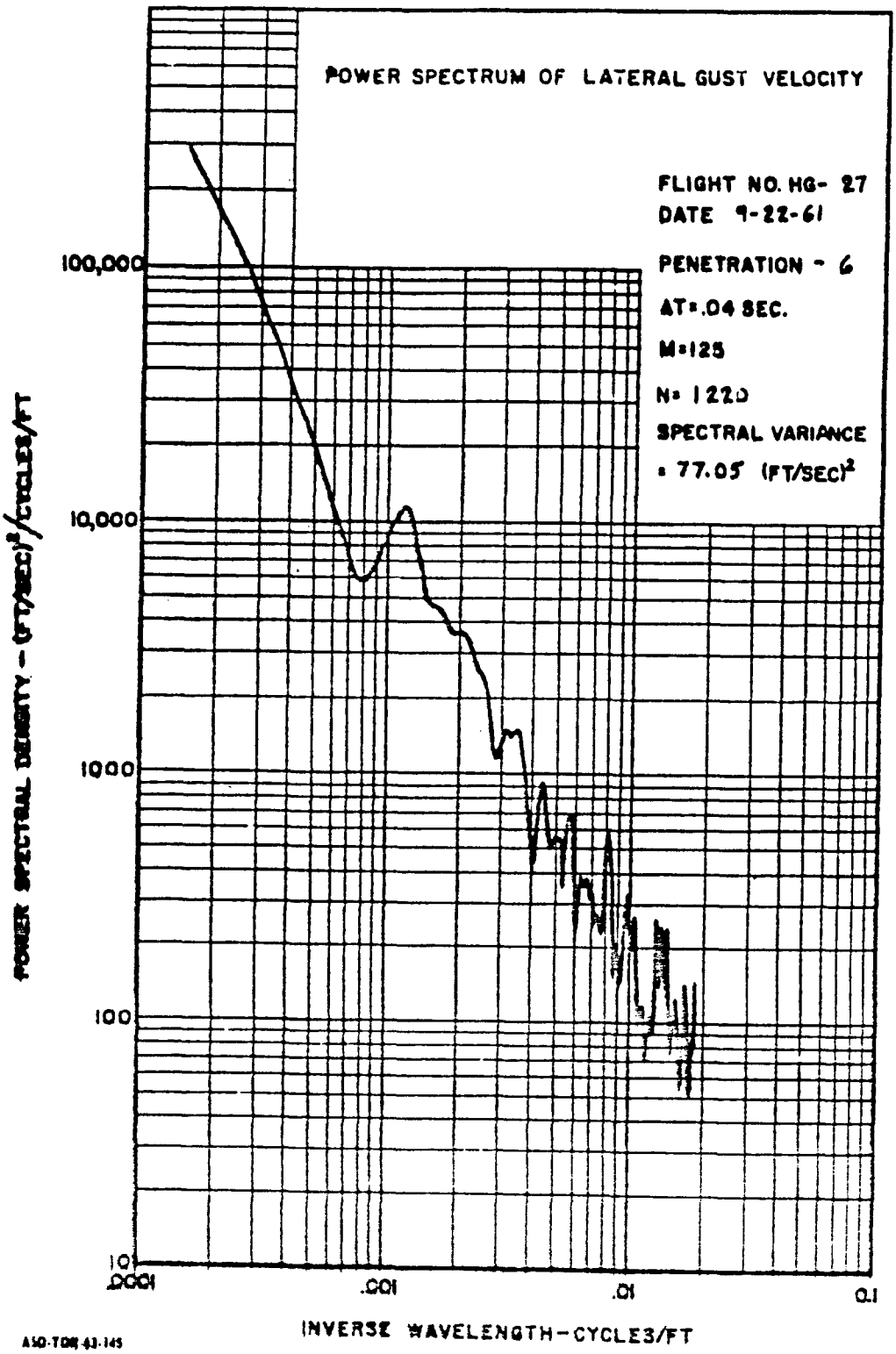

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 310
SPECTRAL VARIANCE
= 74.28 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

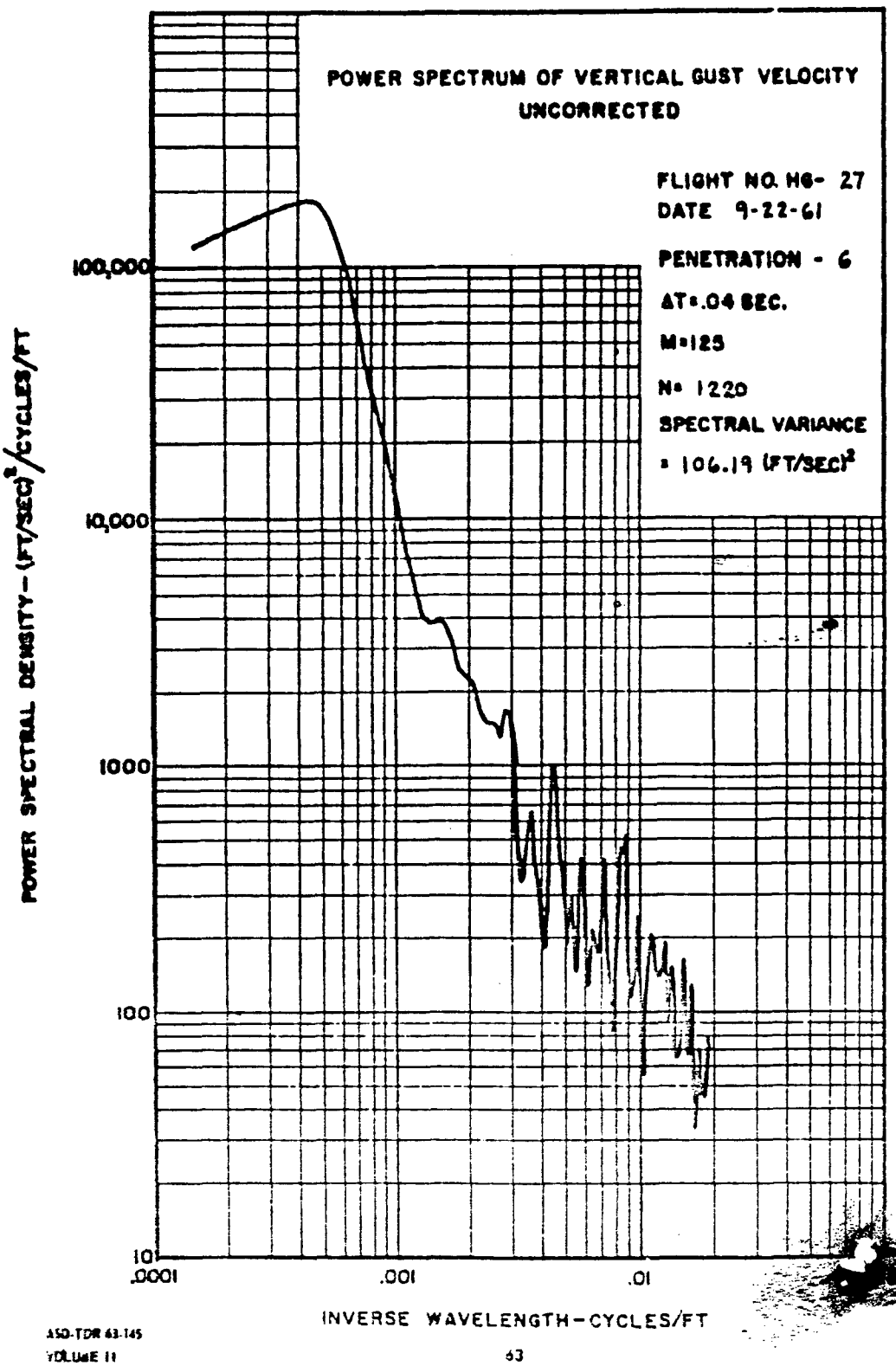

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 5'
ΔT = .04 SEC.
M = 125
N = 310
SPECTRAL VARIANCE
= 48.12 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

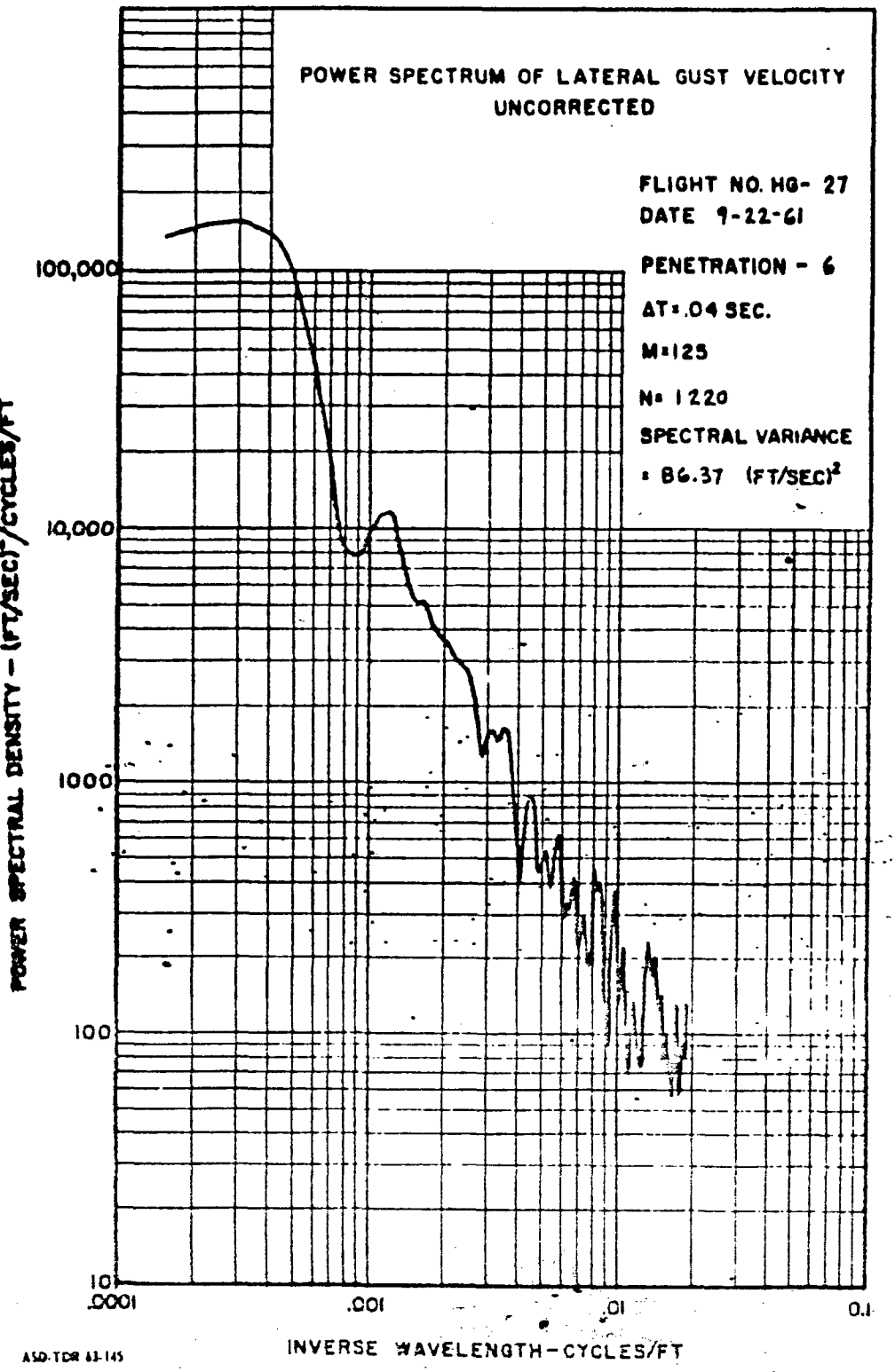

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 310
SPECTRAL VARIANCE
= 45.87 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

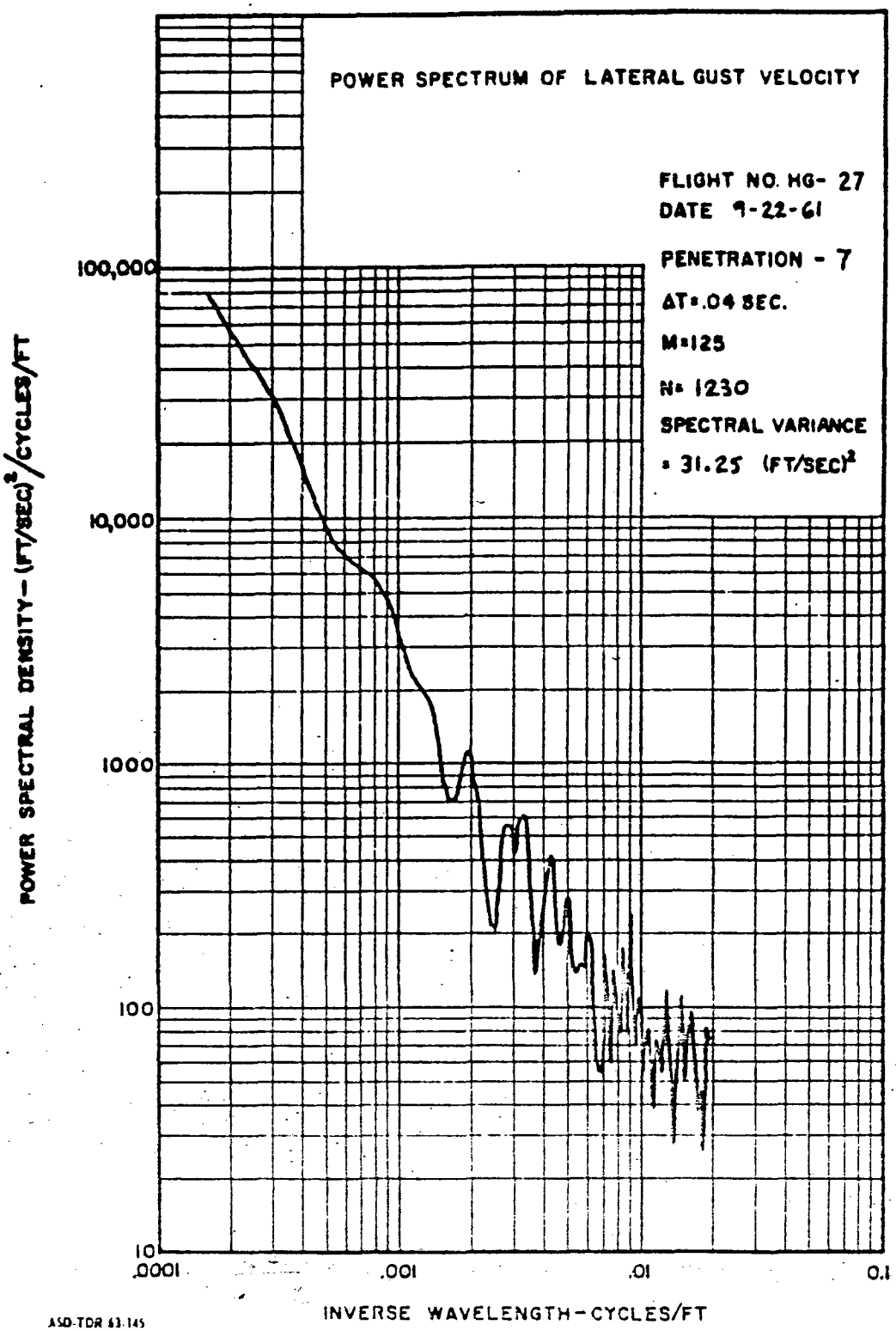

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 5'
ΔT=.04 SEC.
M=125
N= 310
SPECTRAL VARIANCE
= 34.55 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

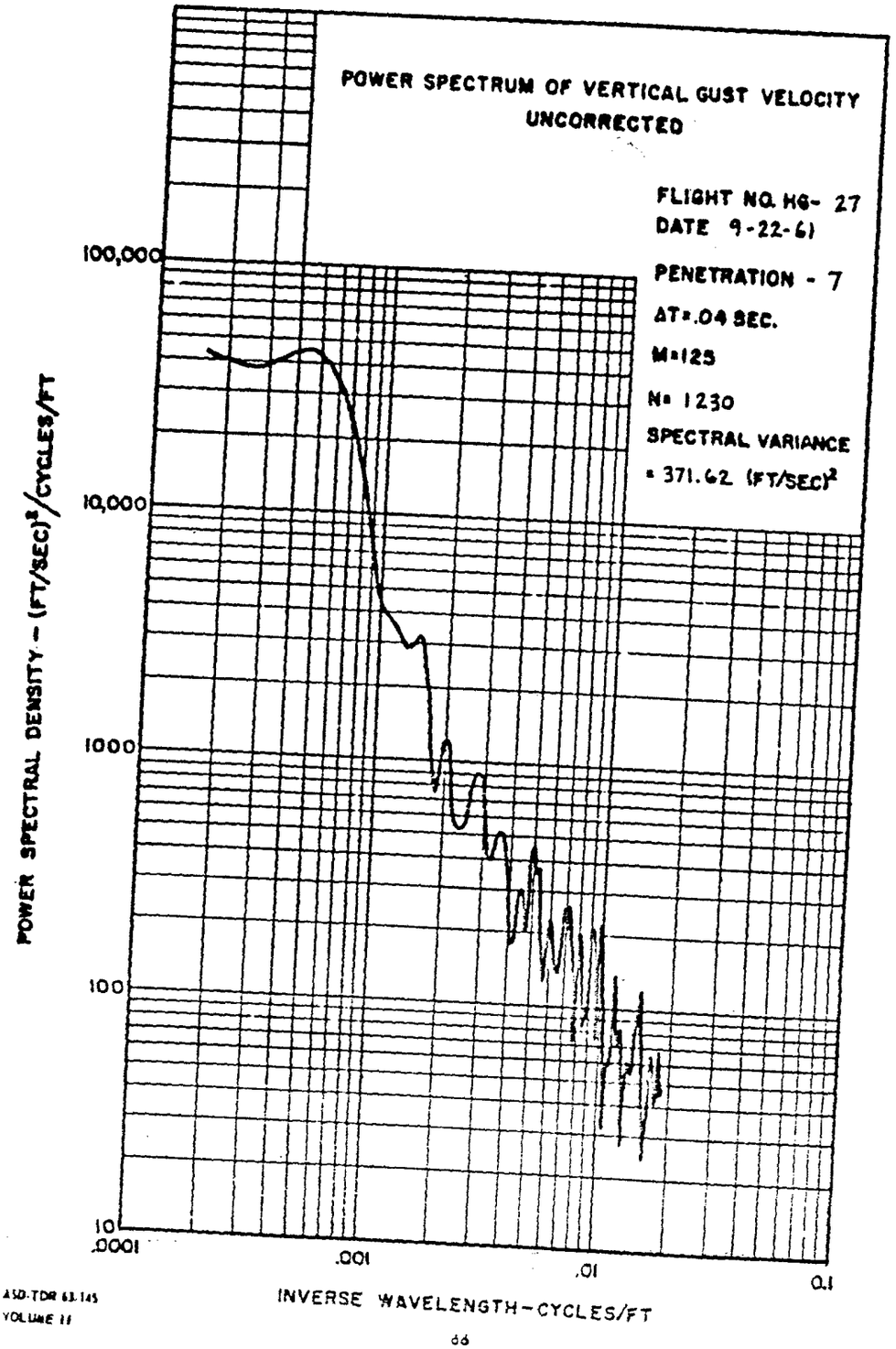

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 1220
SPECTRAL VARIANCE
= 203.90 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

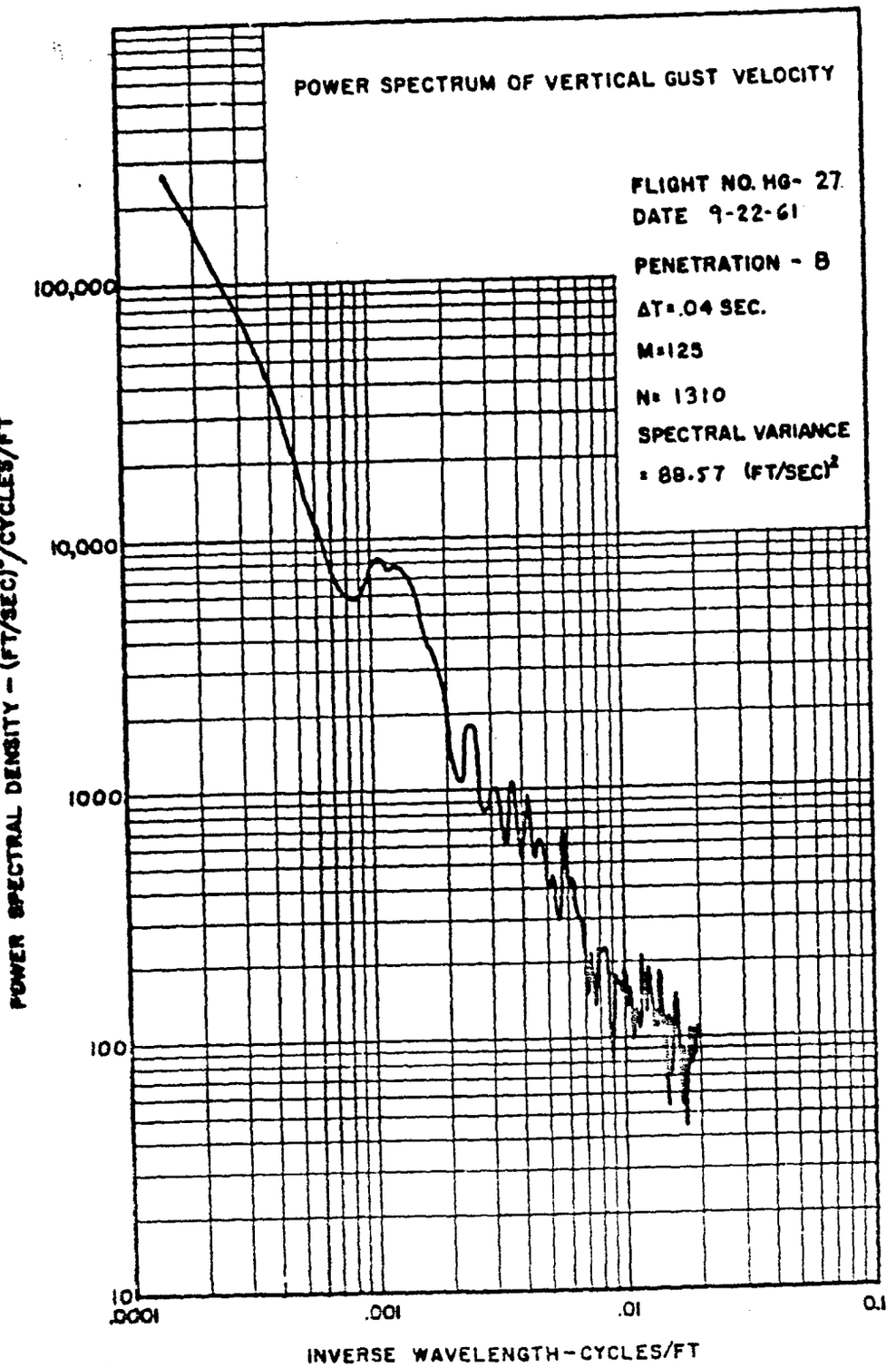

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 1220
SPECTRAL VARIANCE
= 77.05 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

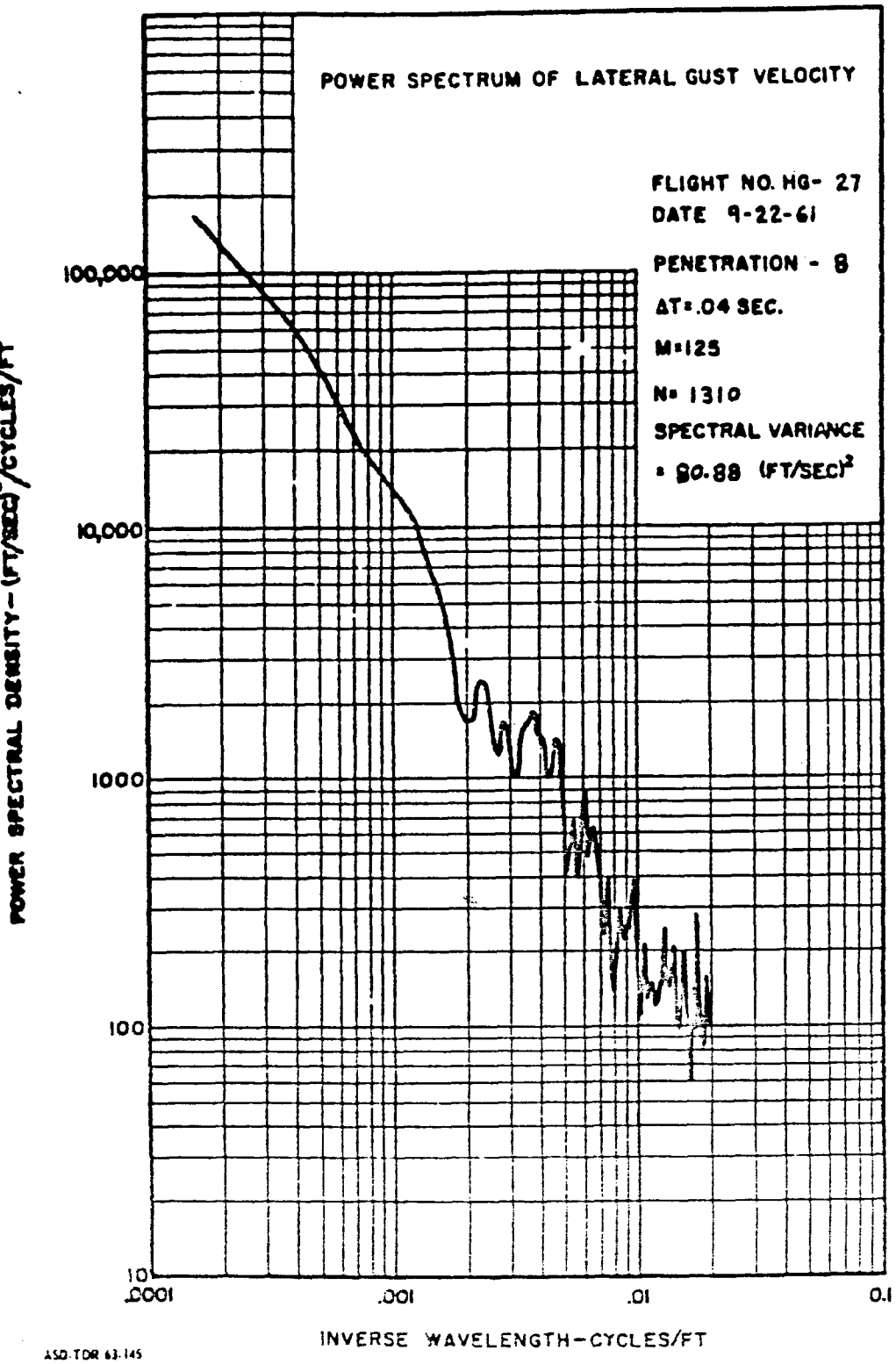

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 1220
SPECTRAL VARIANCE
= 106.19 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
INVERSE WAVELENGTH - CYCLES/FT

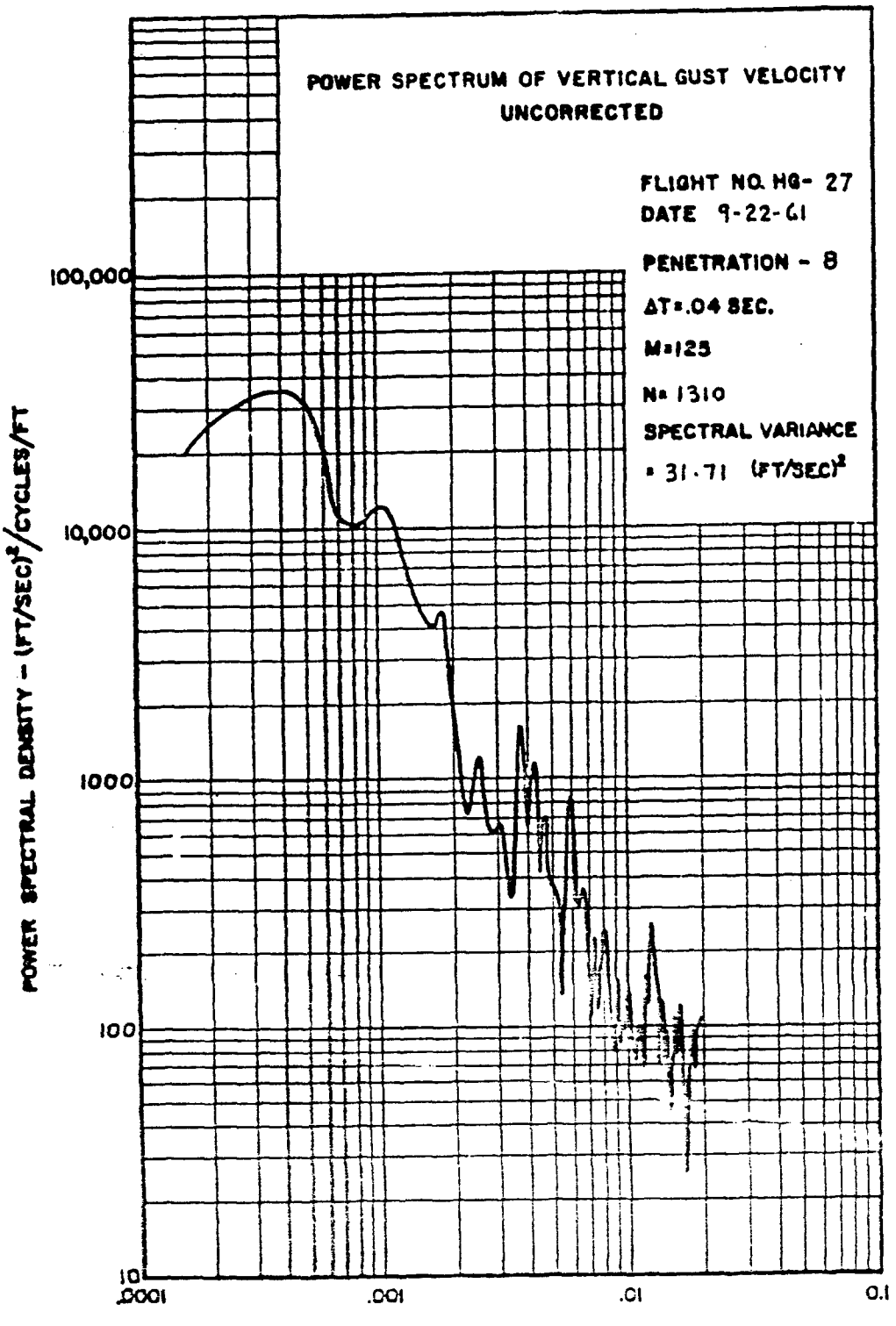

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 1220
SPECTRAL VARIANCE
= 86.37 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

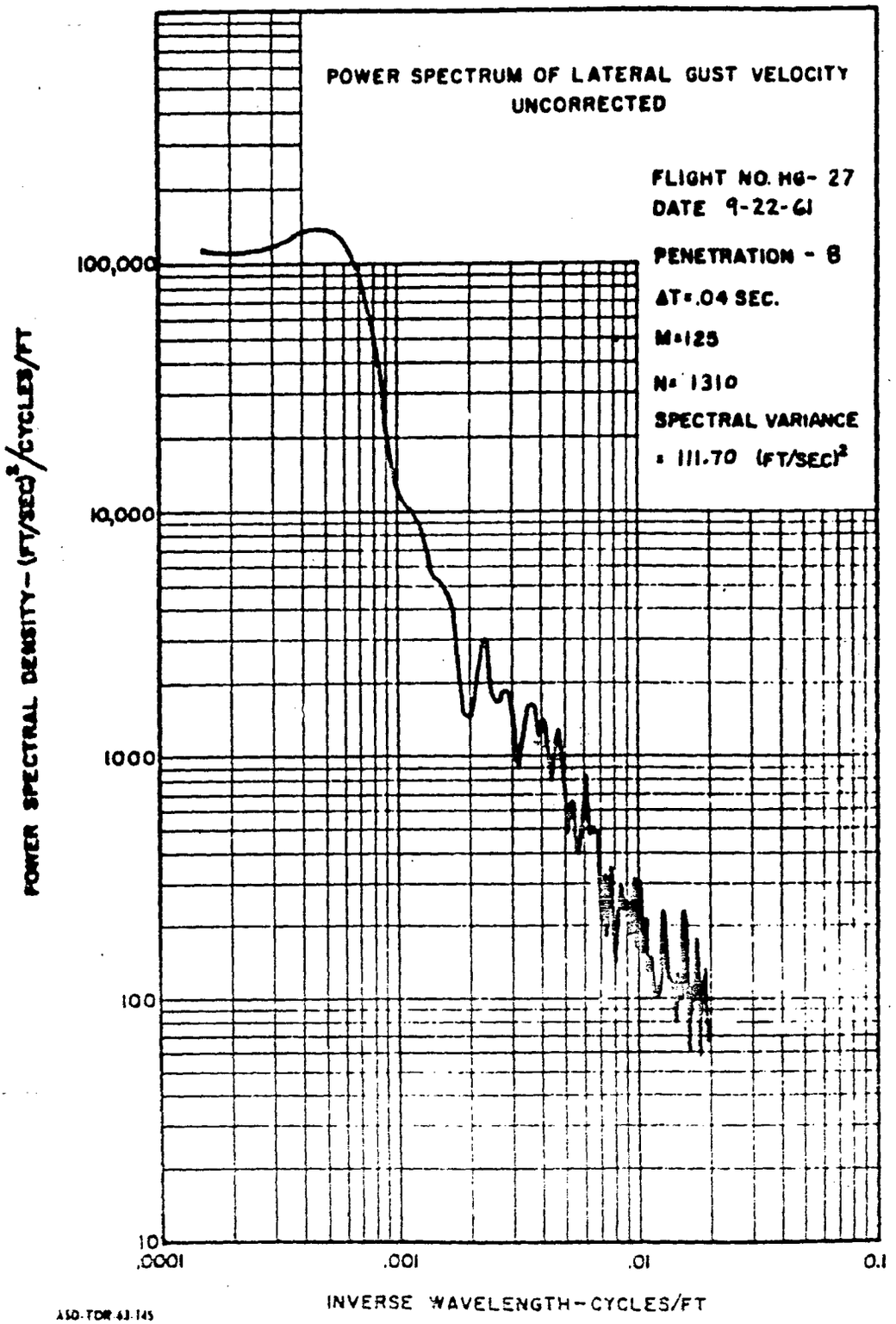

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 1230
SPECTRAL VARIANCE
= 31.25 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

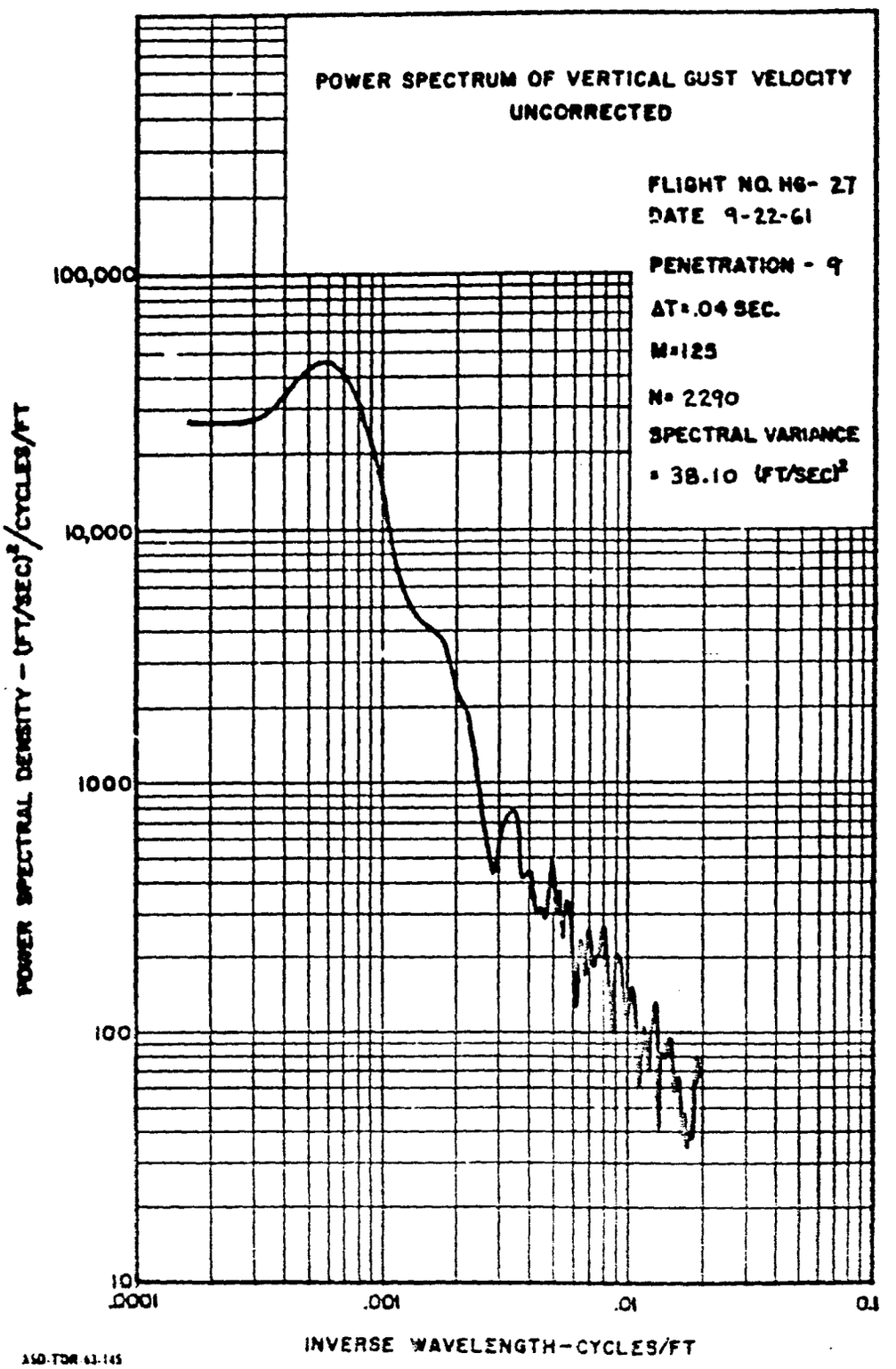

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 1230
SPECTRAL VARIANCE
= 371.62 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

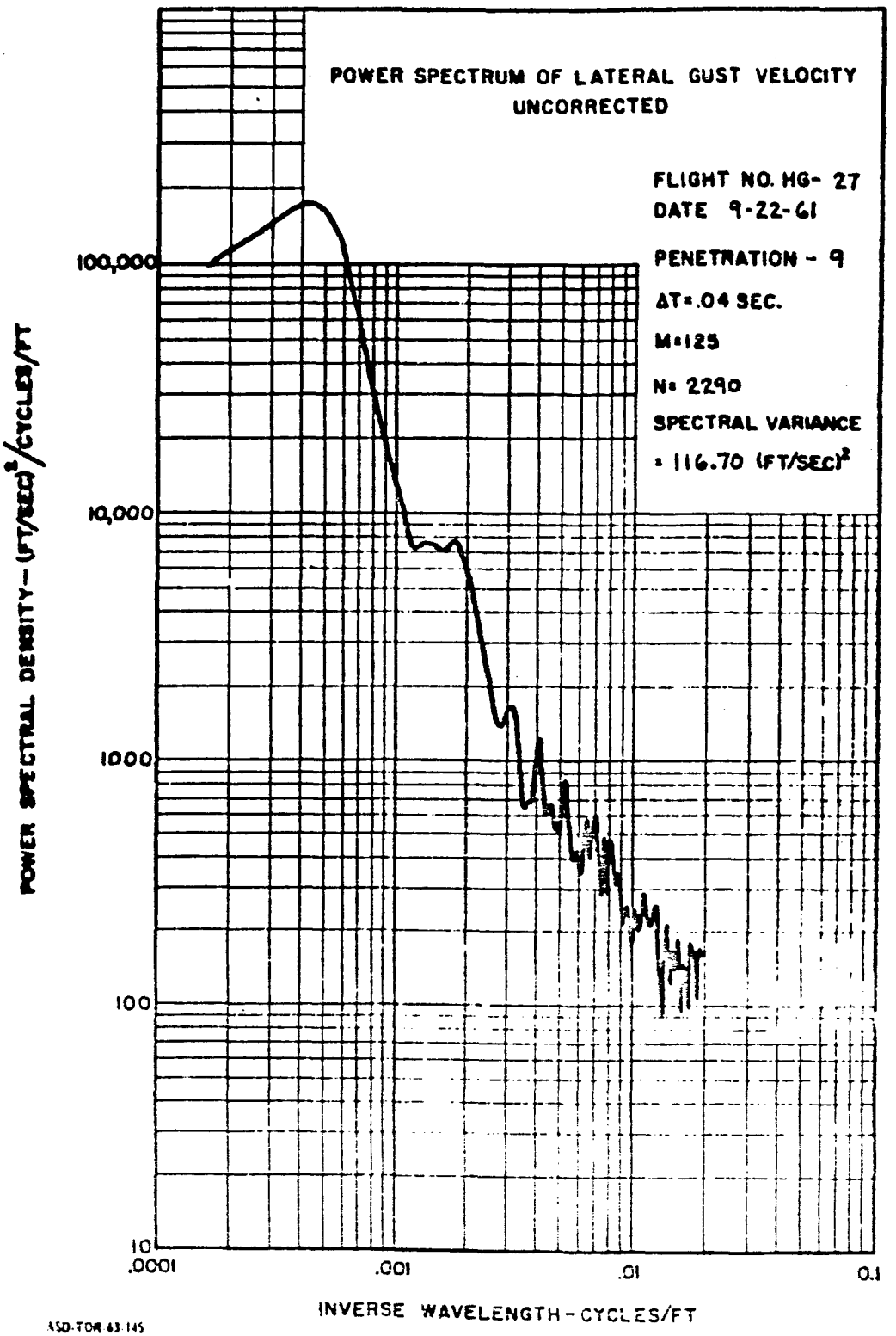

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - B
ΔT=.04 SEC.
M=125
N= 1310
SPECTRAL VARIANCE
= 88.57 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

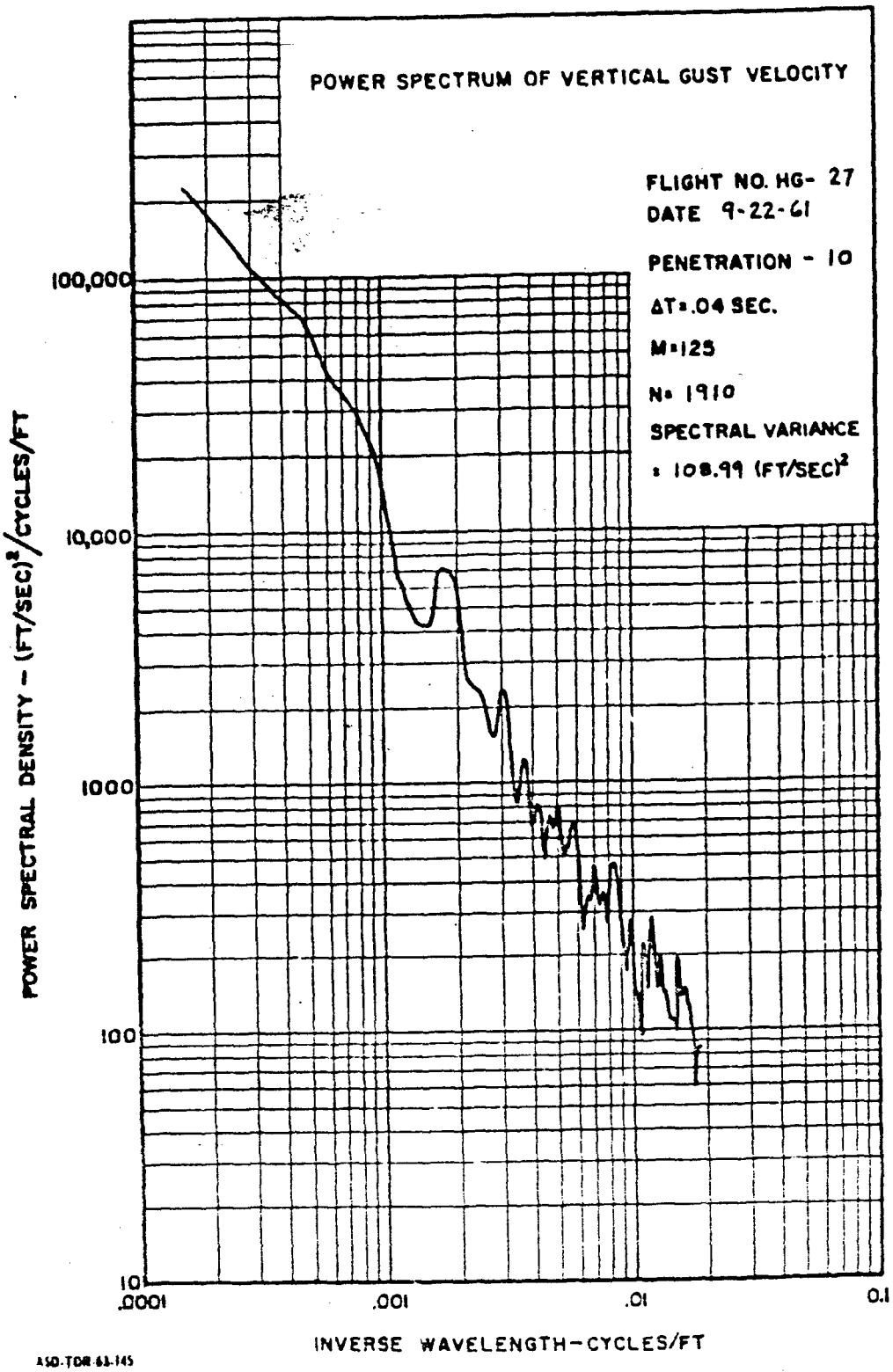

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 1310
SPECTRAL VARIANCE
= 80.88 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

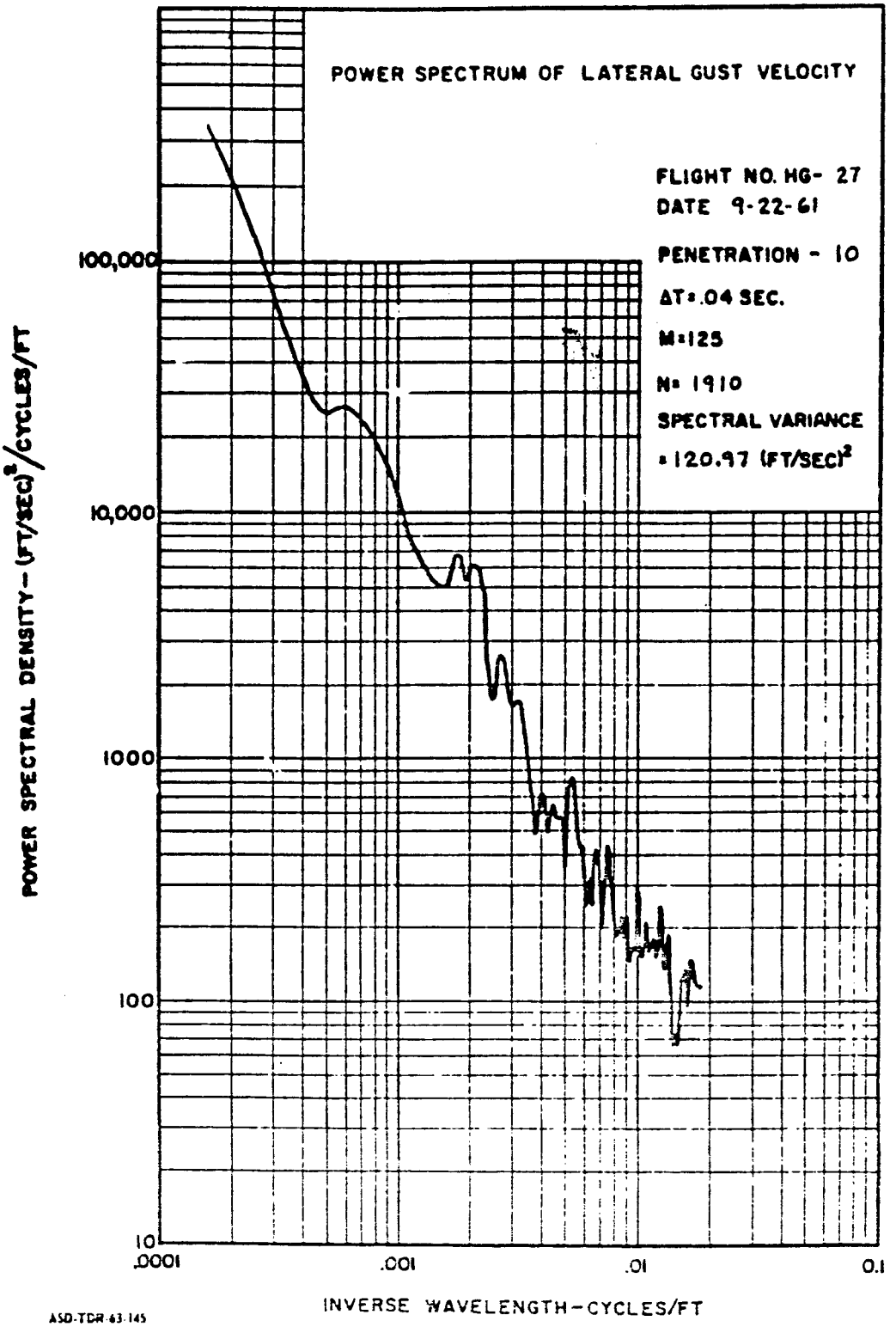

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 1310
SPECTRAL VARIANCE
= 31.71 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

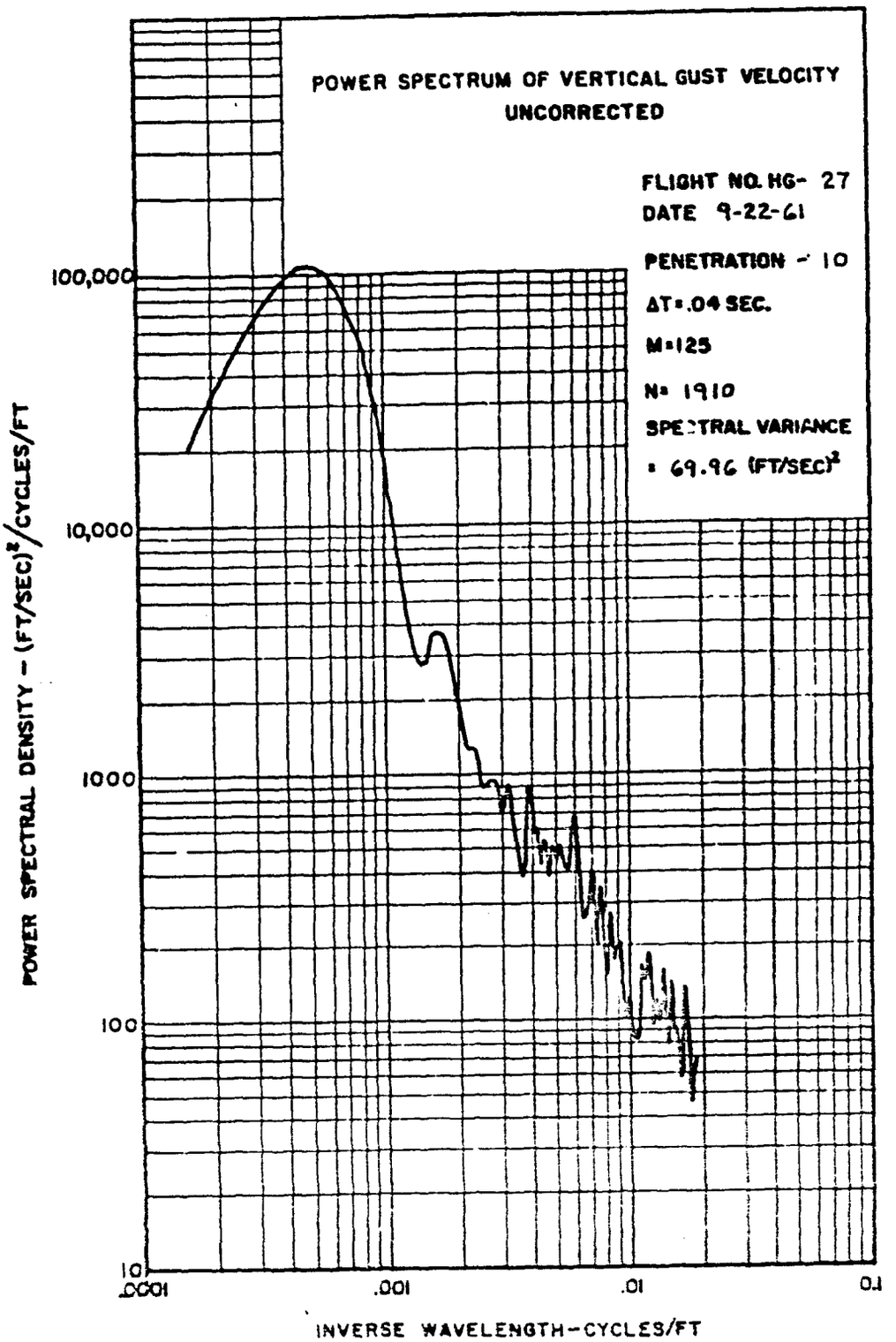

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 1310
SPECTRAL VARIANCE
= 111.70 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

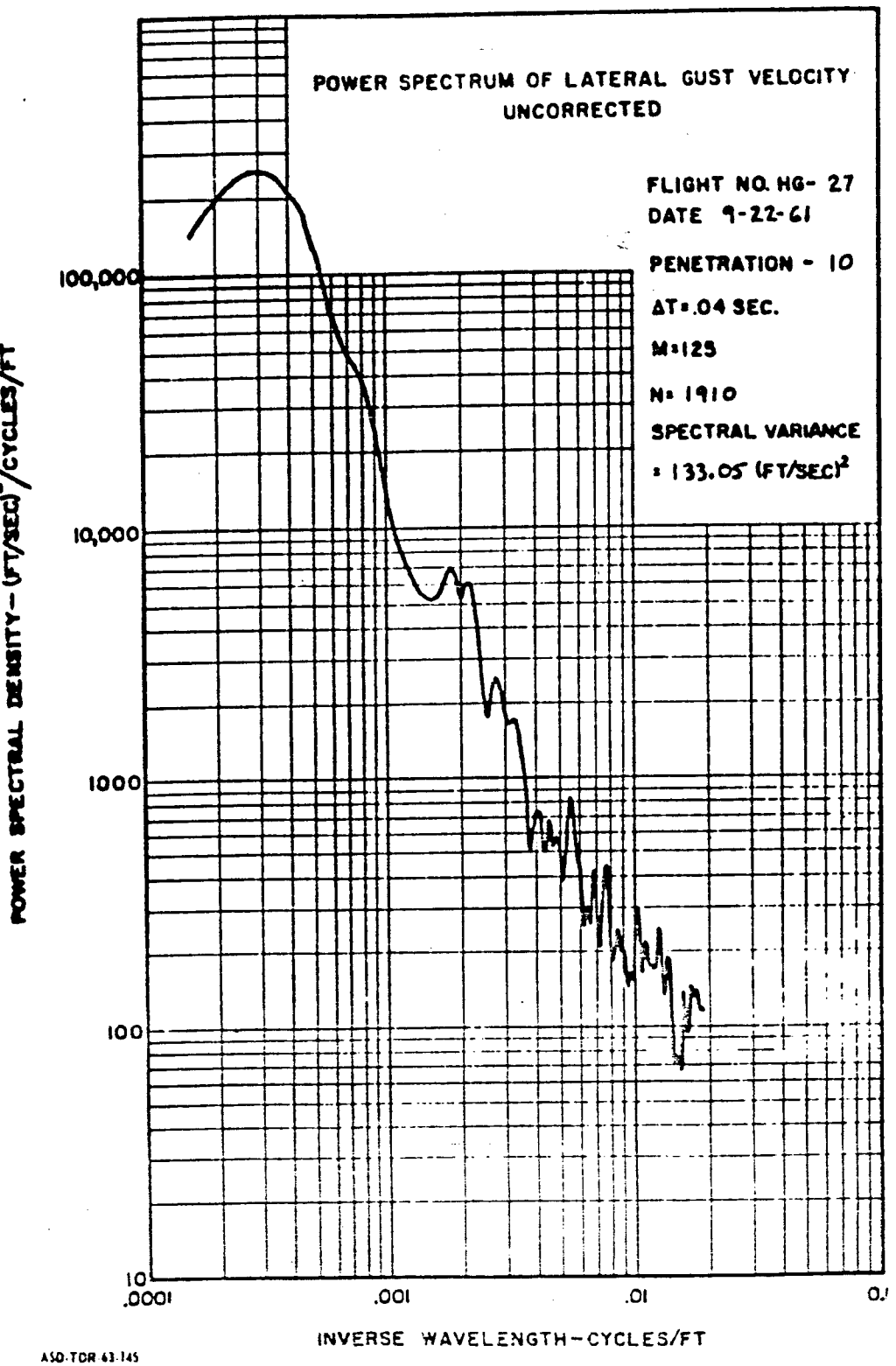

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 2290
SPECTRAL VARIANCE
= 38.10 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

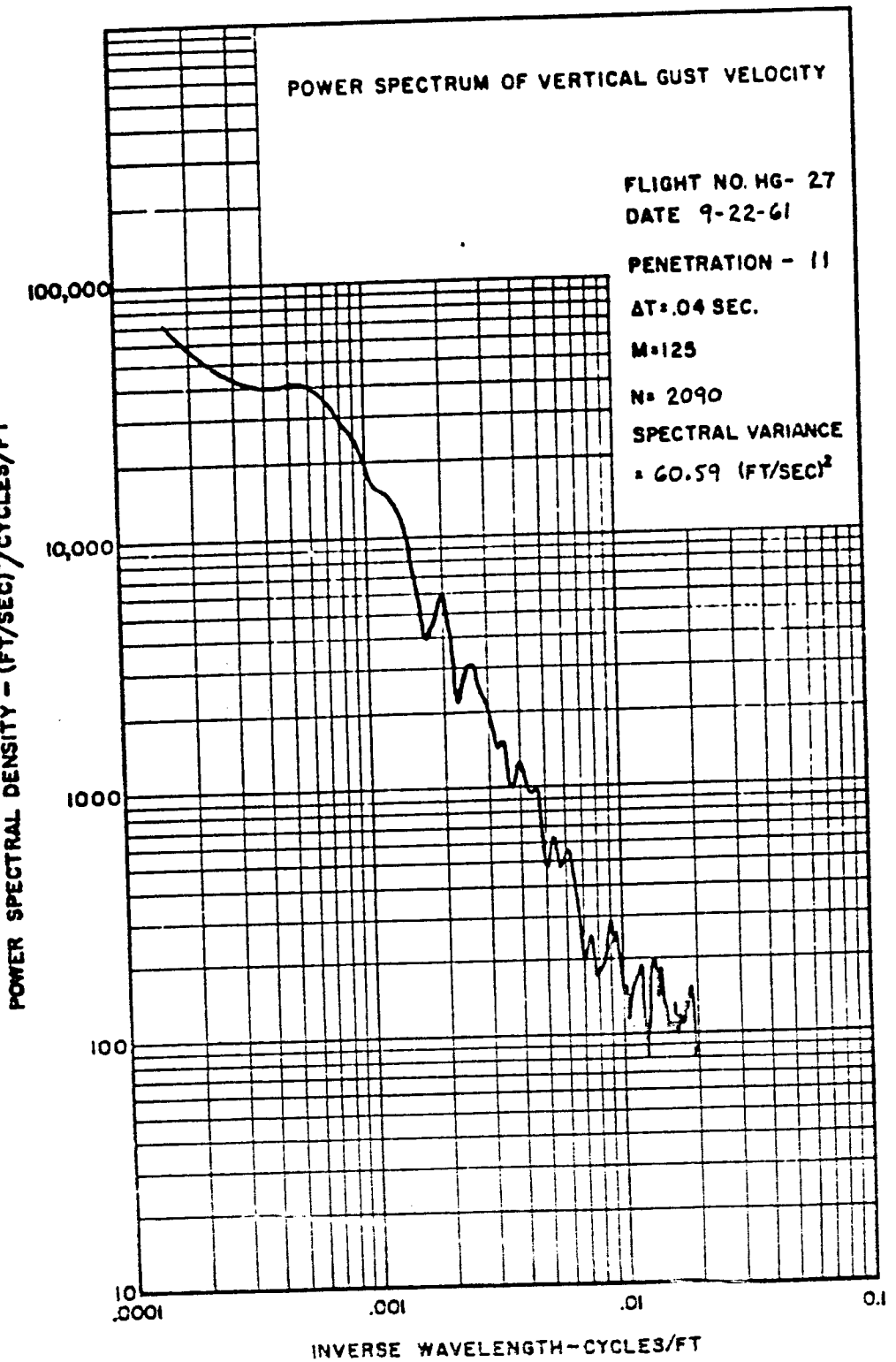

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 2290
SPECTRAL VARIANCE
= 116.70 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

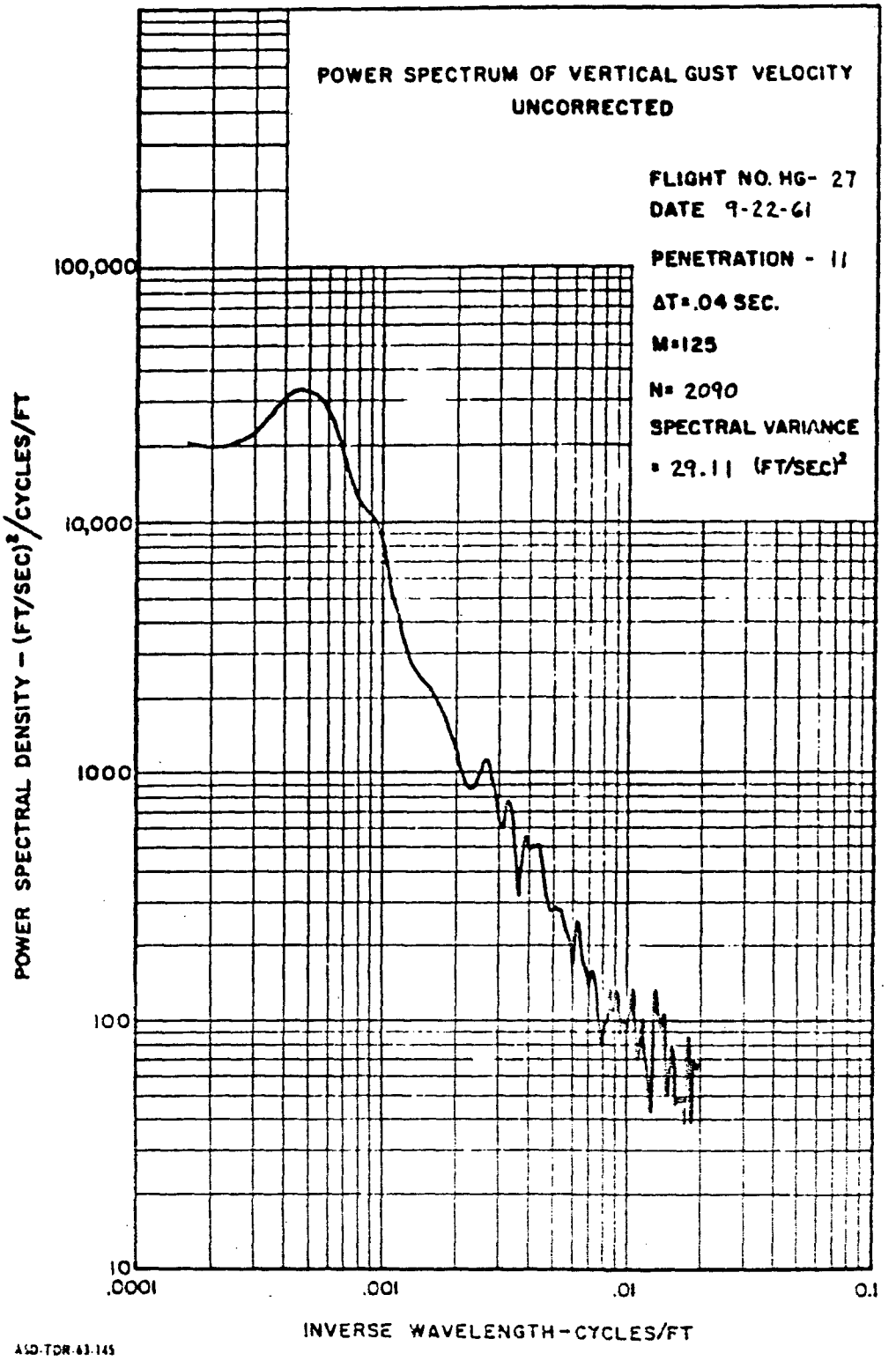

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1910
SPECTRAL VARIANCE
= 108.99 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

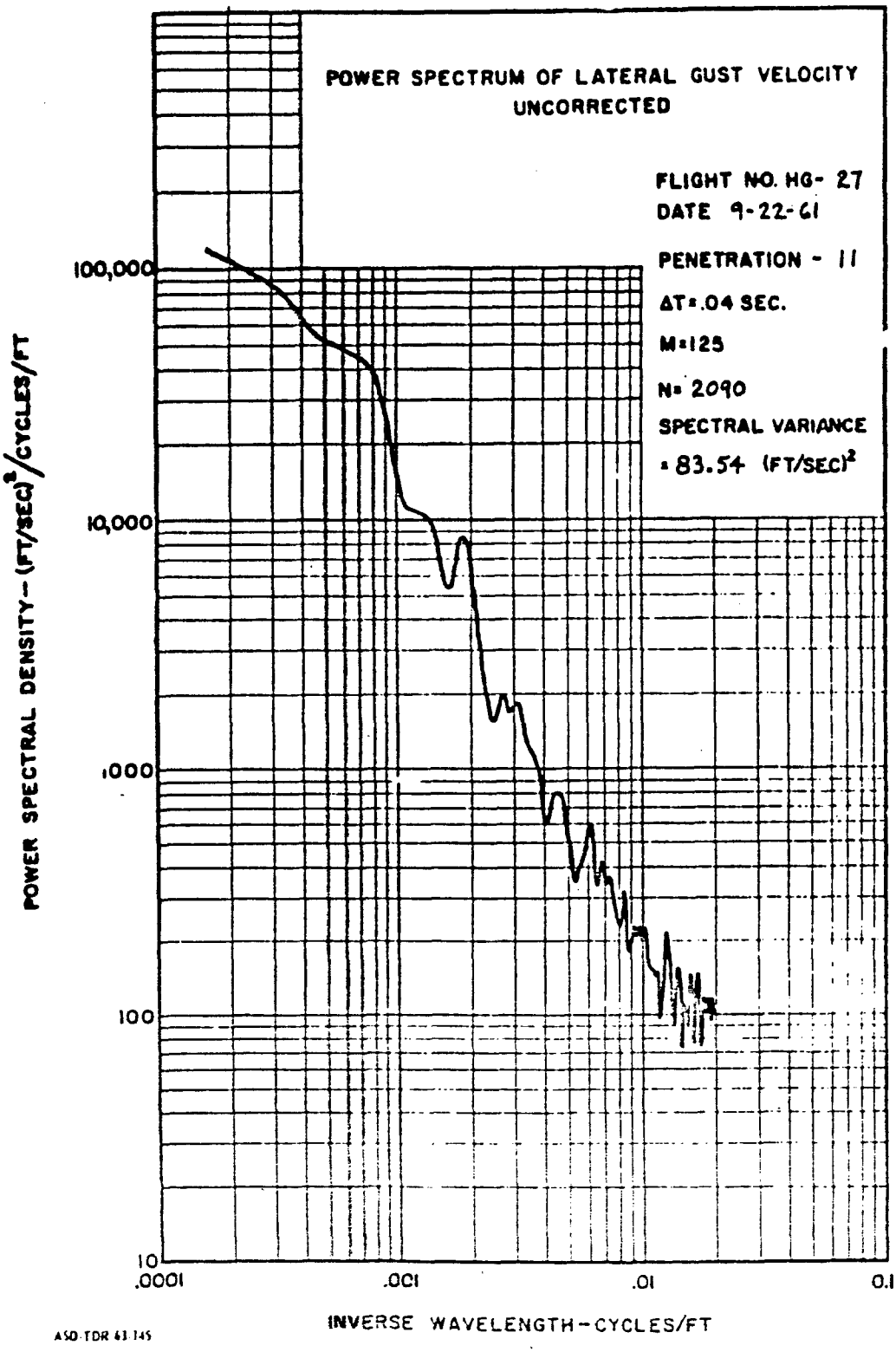

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1910
SPECTRAL VARIANCE
=120.97 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

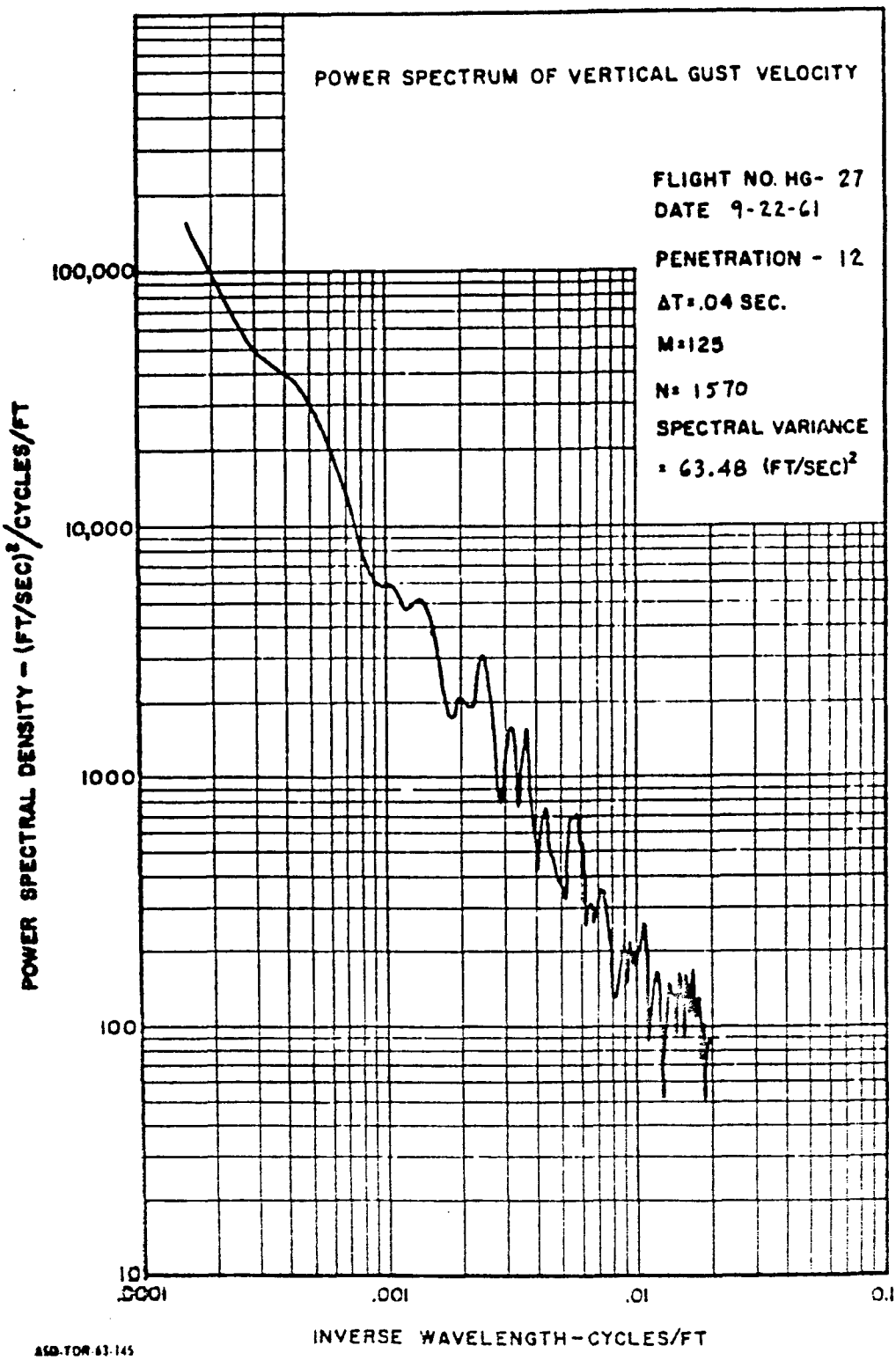

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1910
SPECTRAL VARIANCE
= 69.96 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

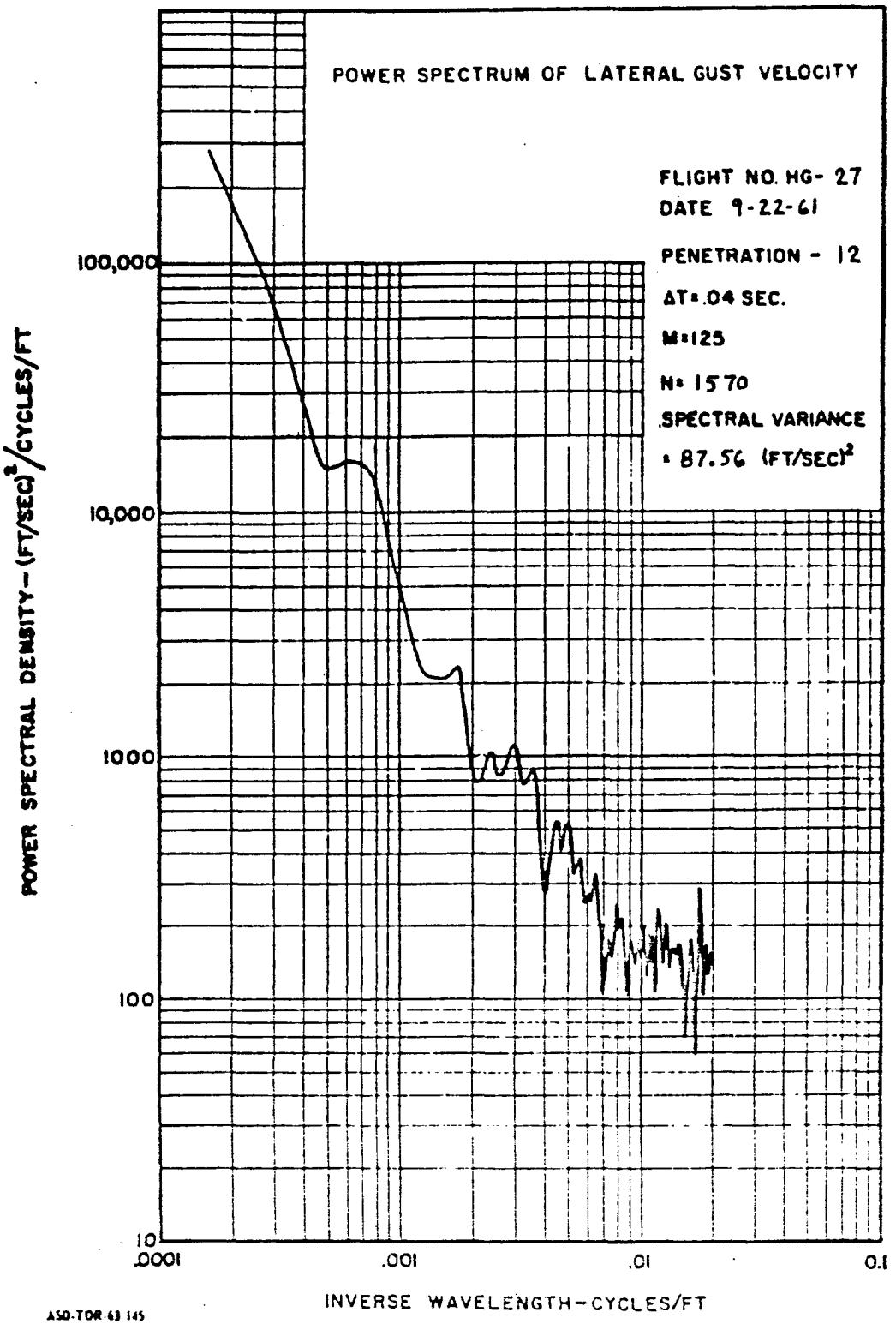

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1910
SPECTRAL VARIANCE
= 133.05 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

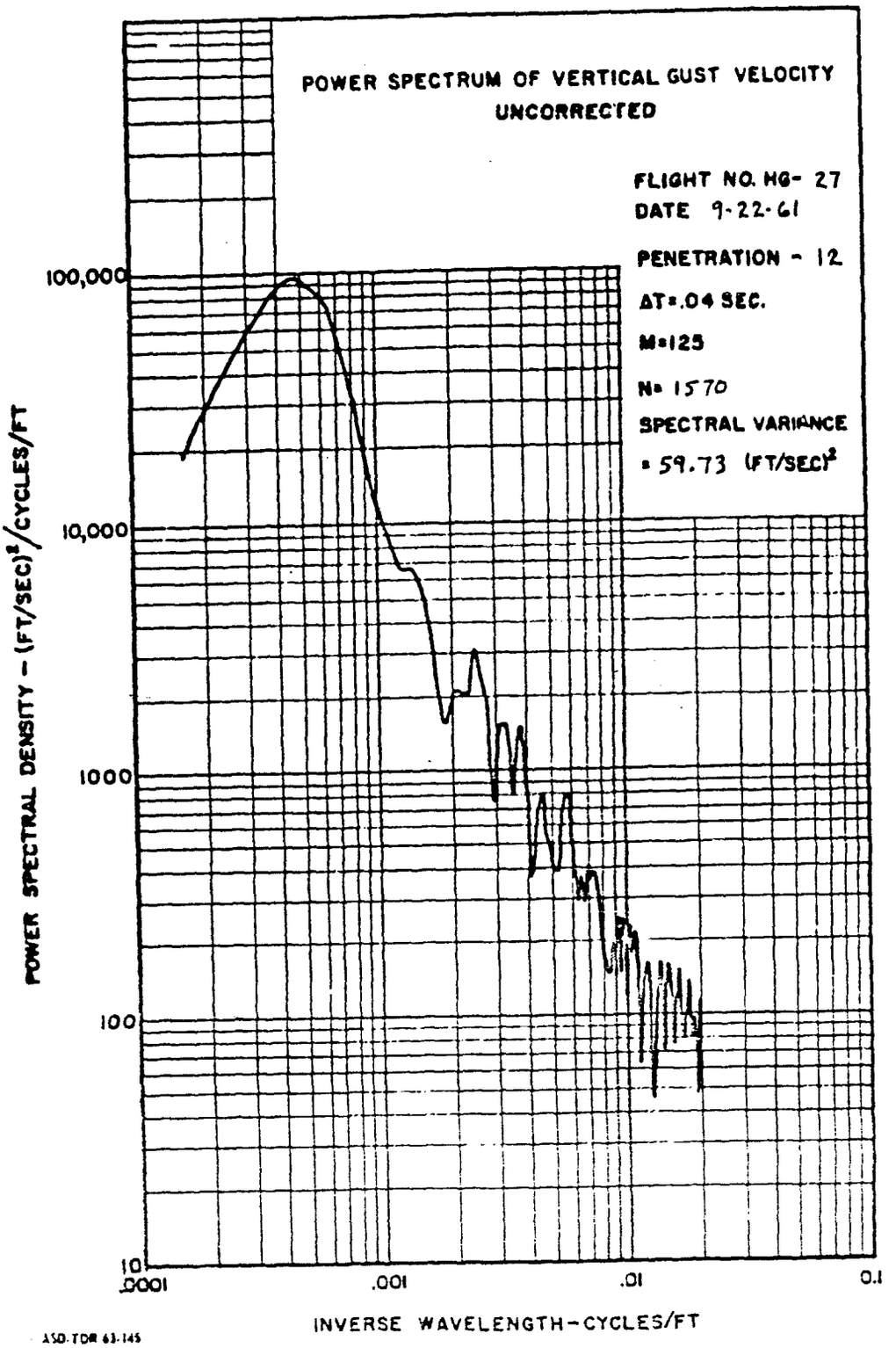

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 2090
SPECTRAL VARIANCE
= 60.59 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

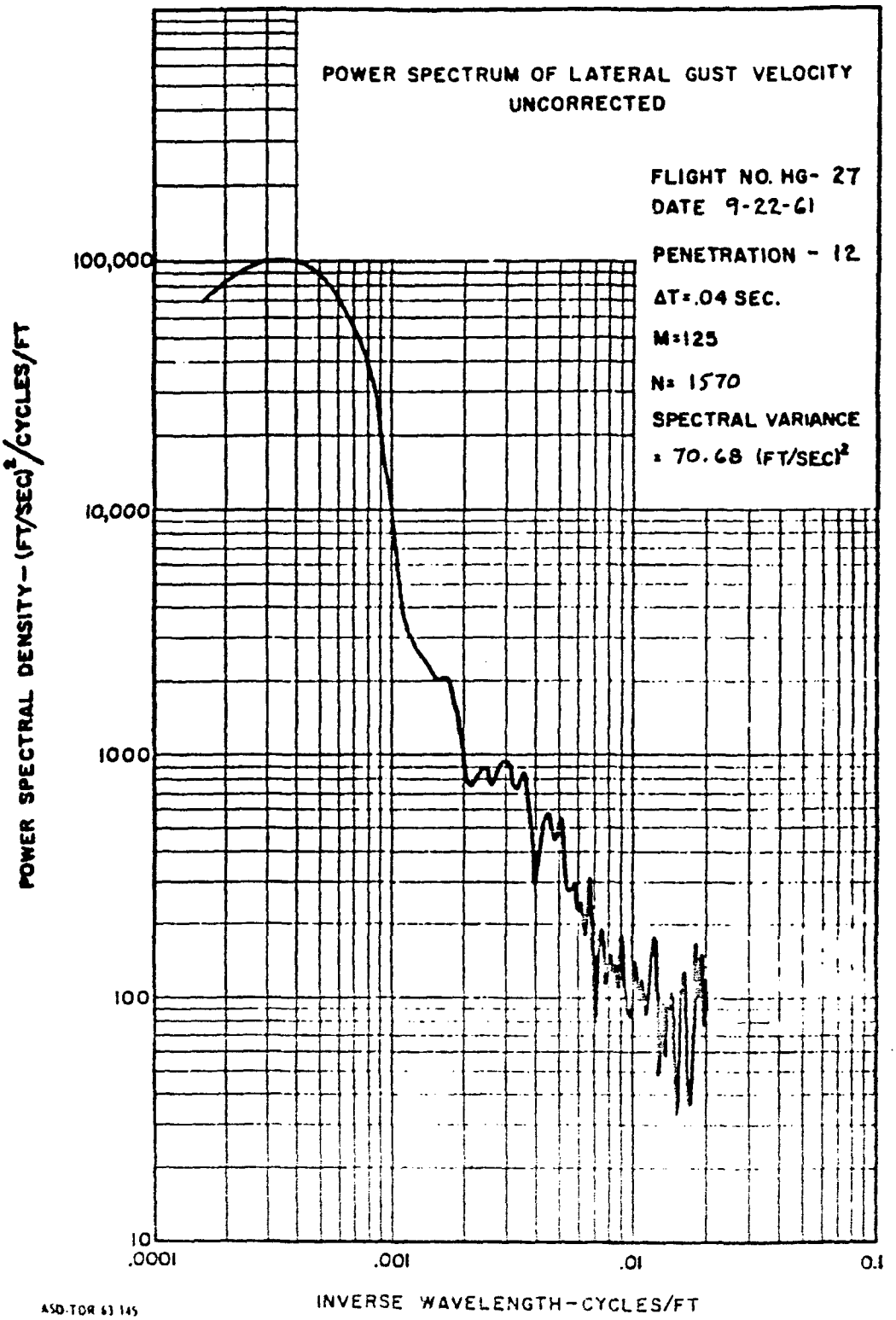

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 2090
SPECTRAL VARIANCE
= 29.11 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

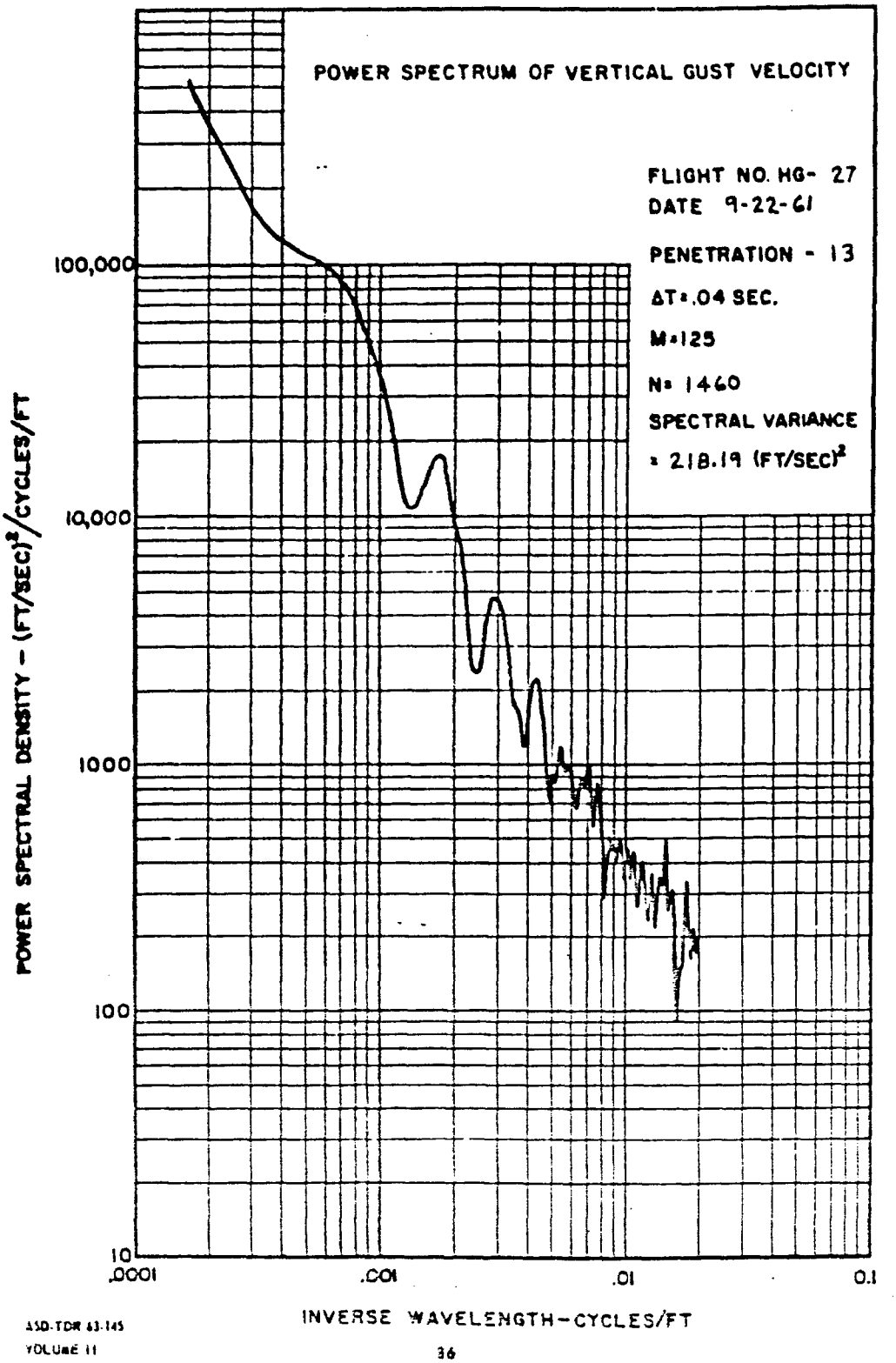

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 2090
SPECTRAL VARIANCE
=83.54 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

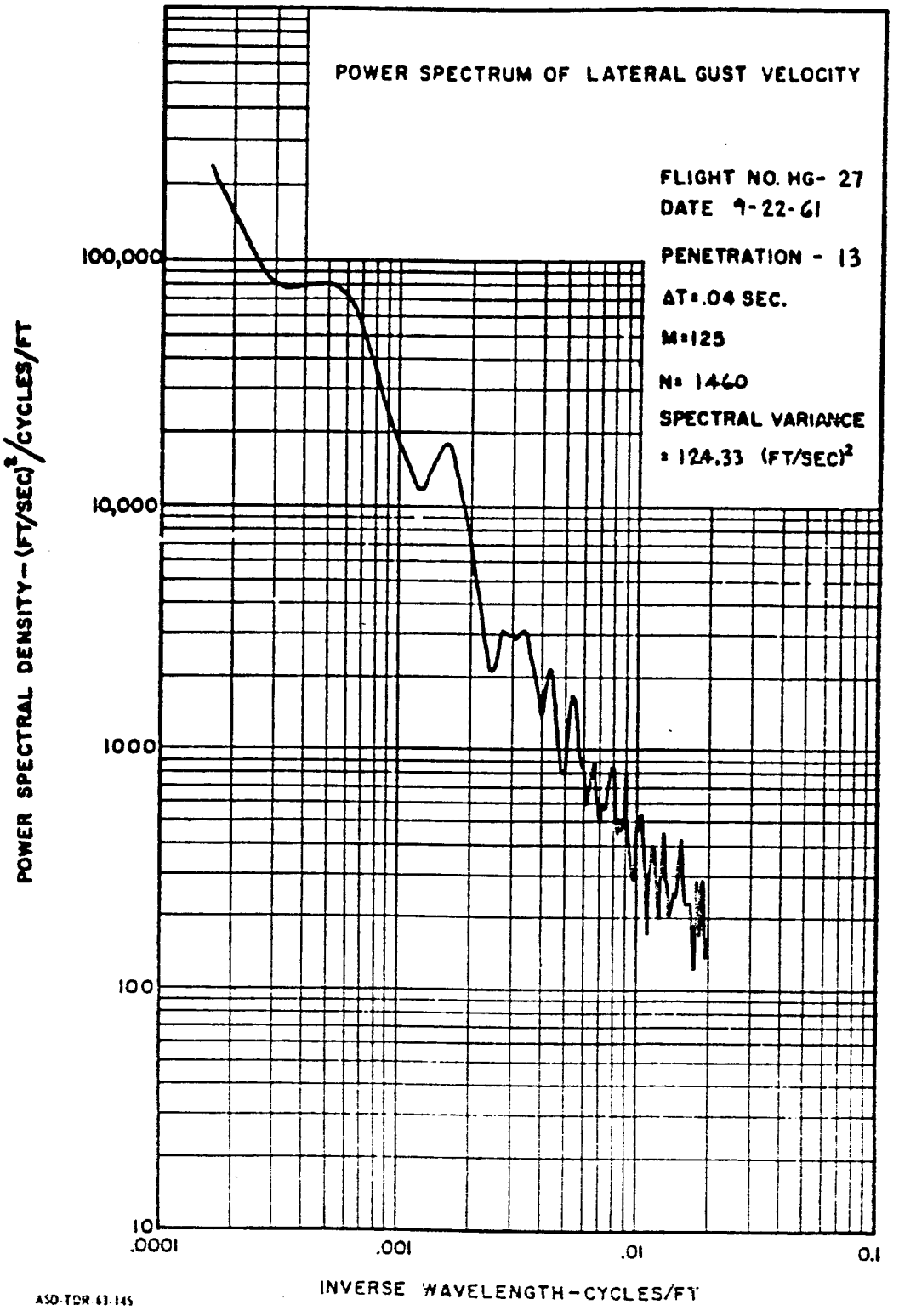

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 1570
SPECTRAL VARIANCE
= 63.48 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

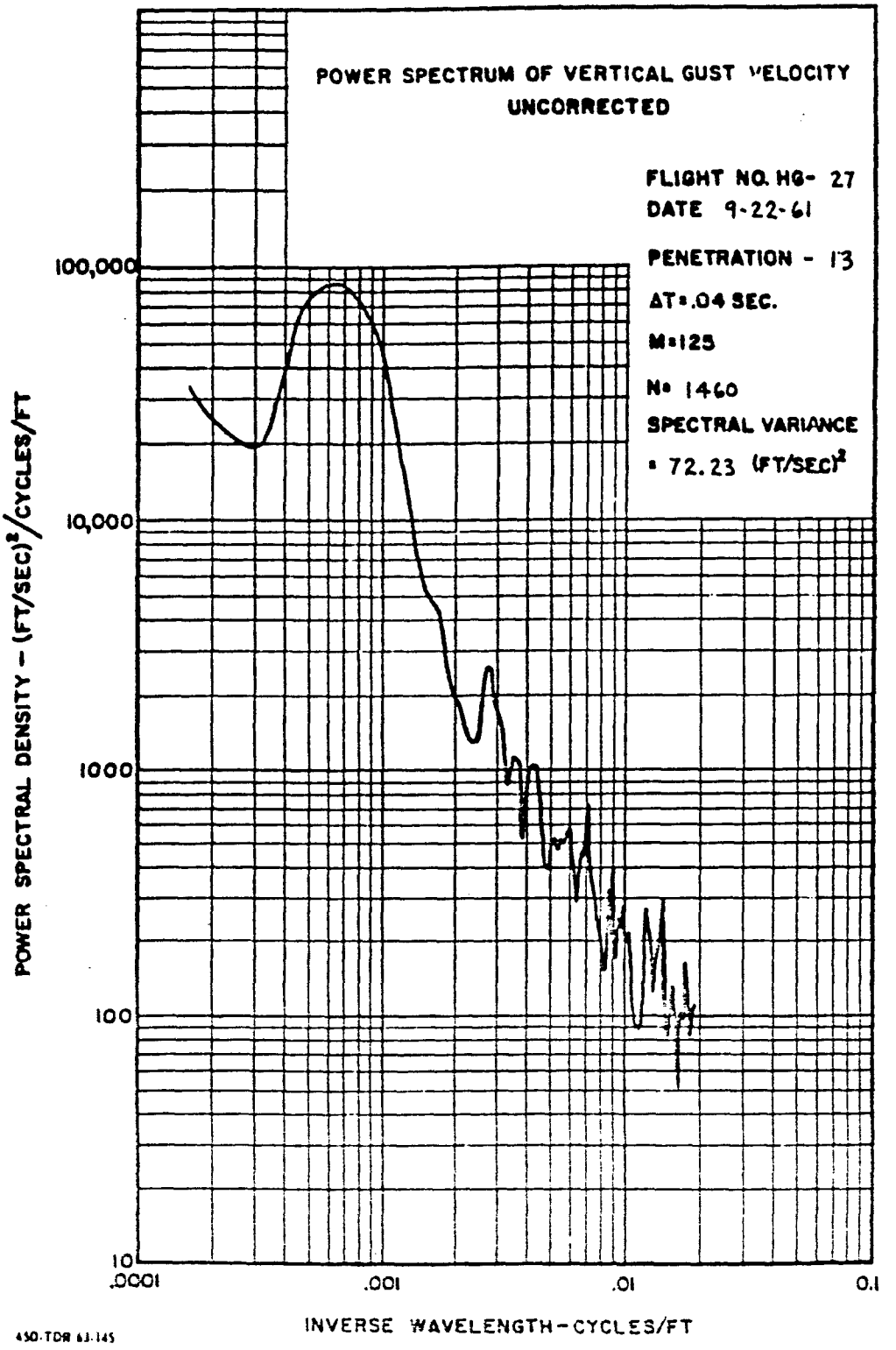

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 1570
SPECTRAL VARIANCE
= 87.56 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

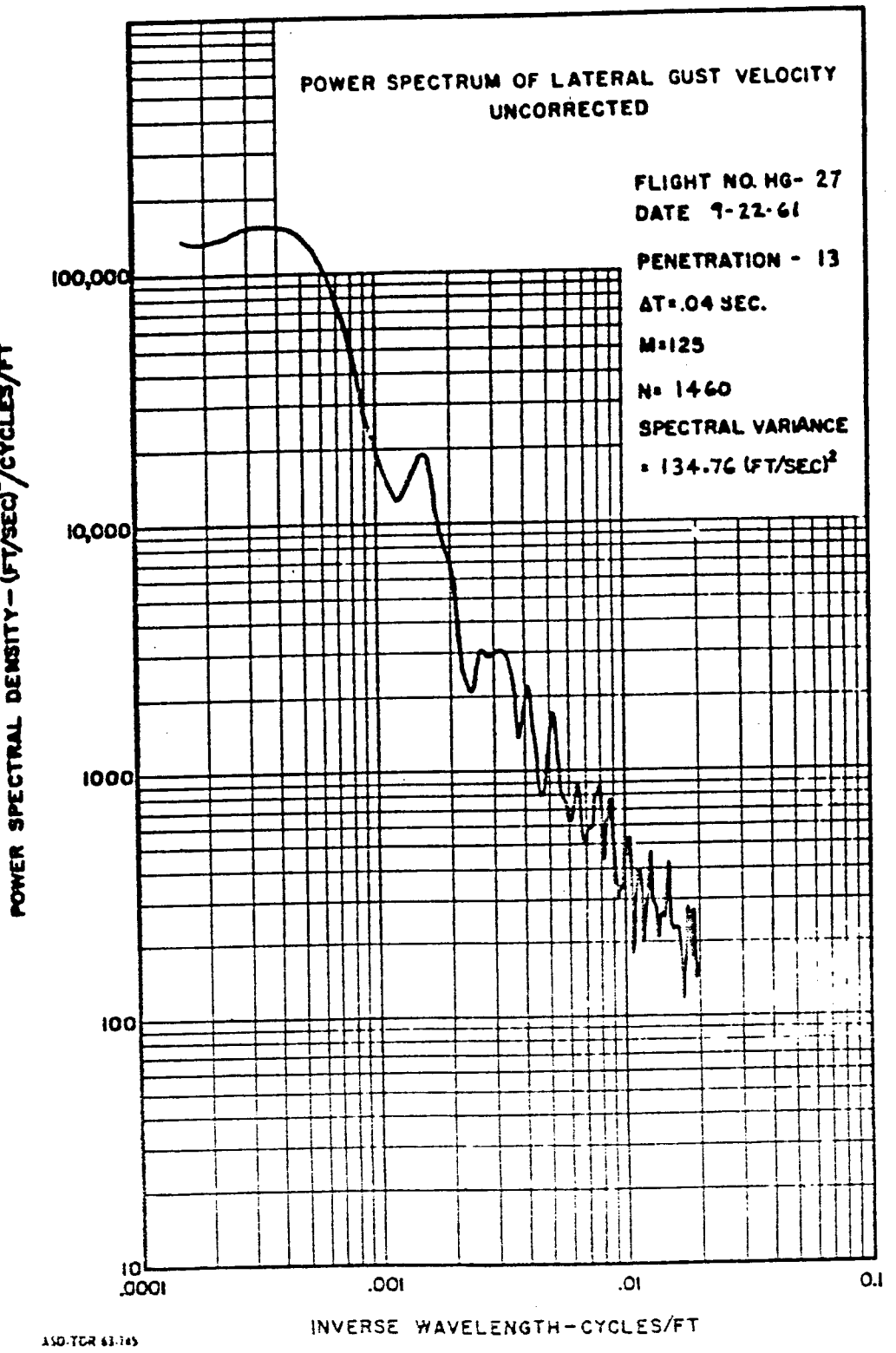

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 1570
SPECTRAL VARIANCE
= 59.73 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

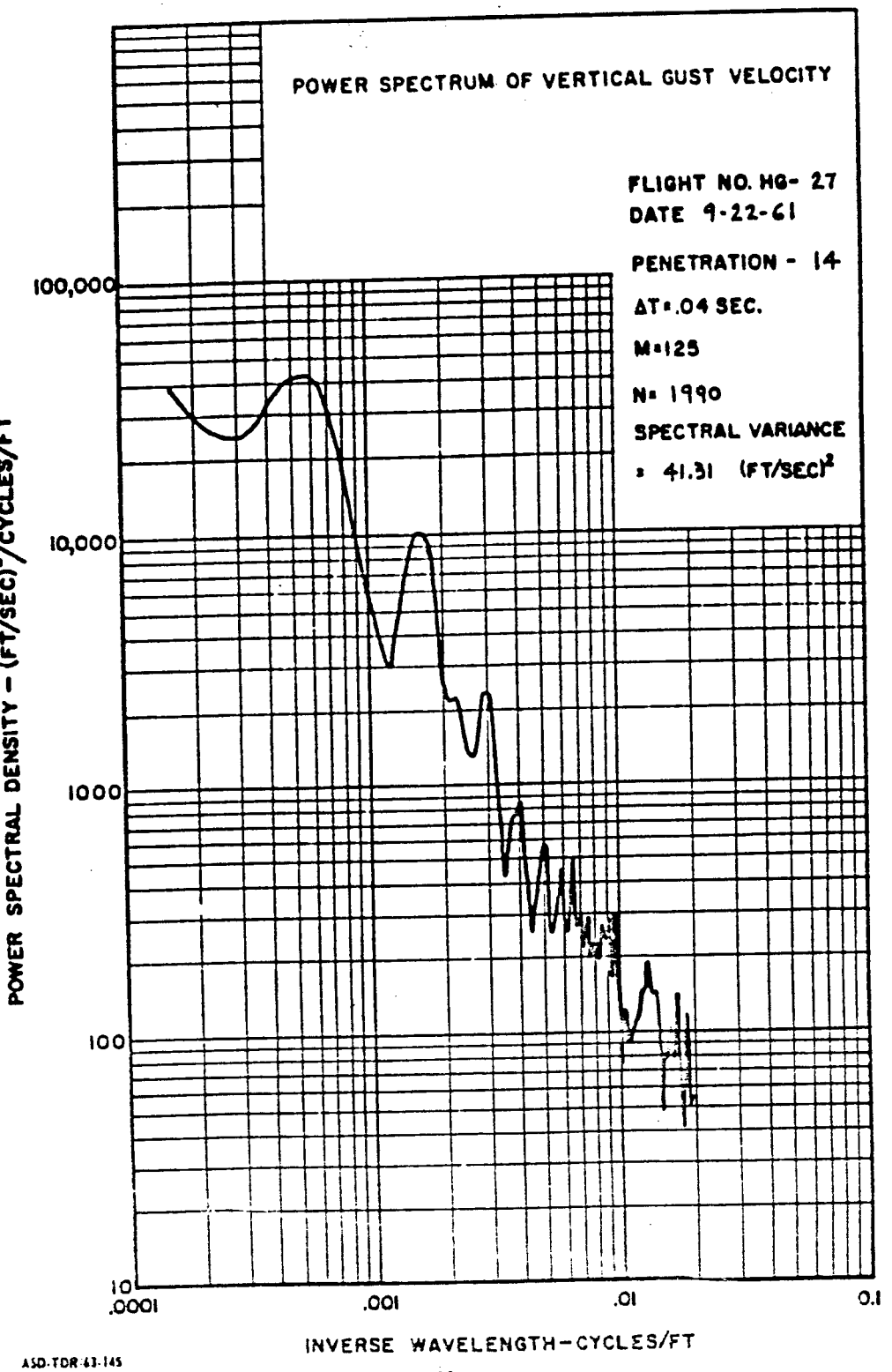

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 1570
SPECTRAL VARIANCE
= 70.68 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

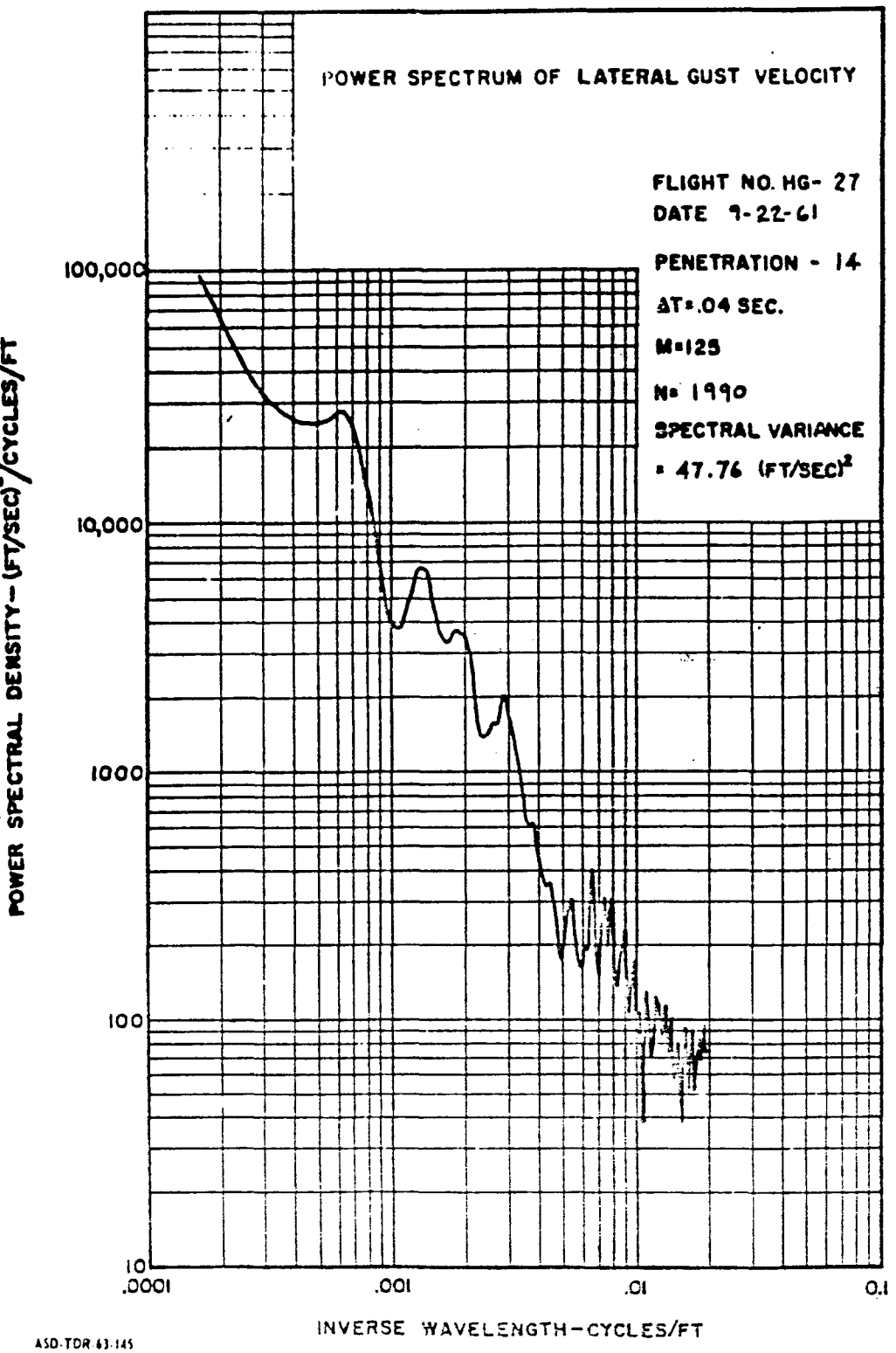

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 1460
SPECTRAL VARIANCE
= 218.19 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

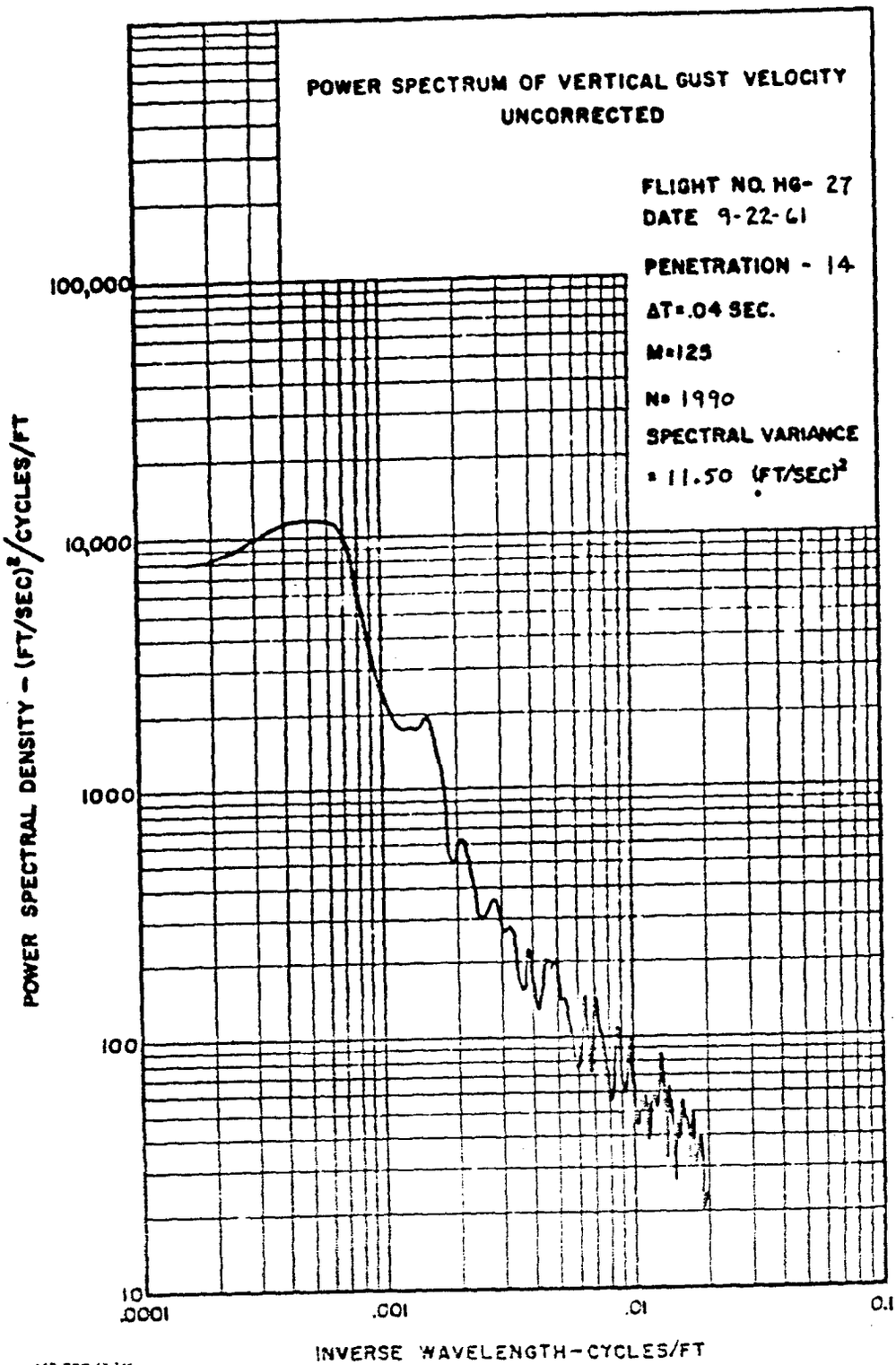

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 1460
SPECTRAL VARIANCE
= 124.33 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

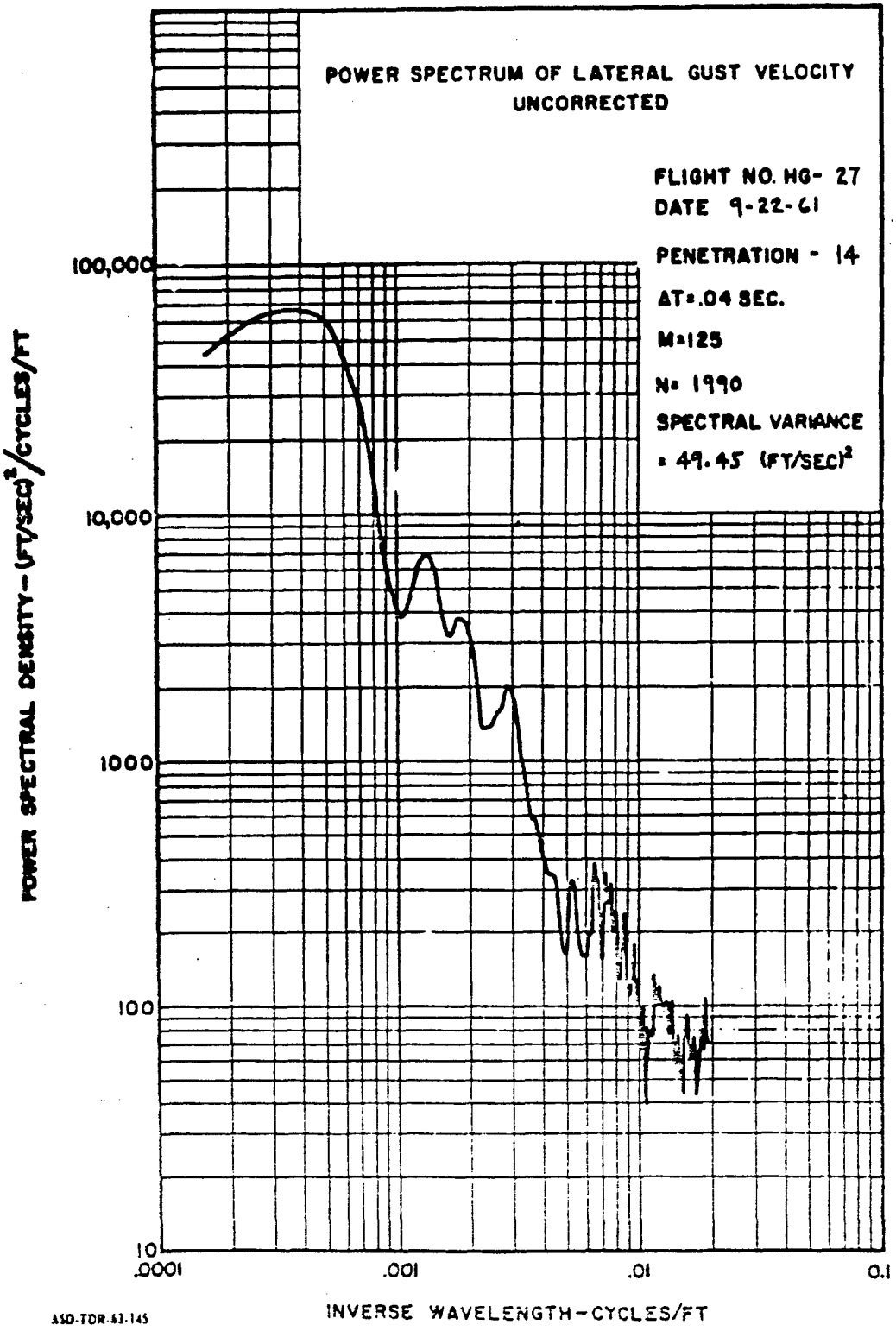

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 1460
SPECTRAL VARIANCE
= 72.23 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

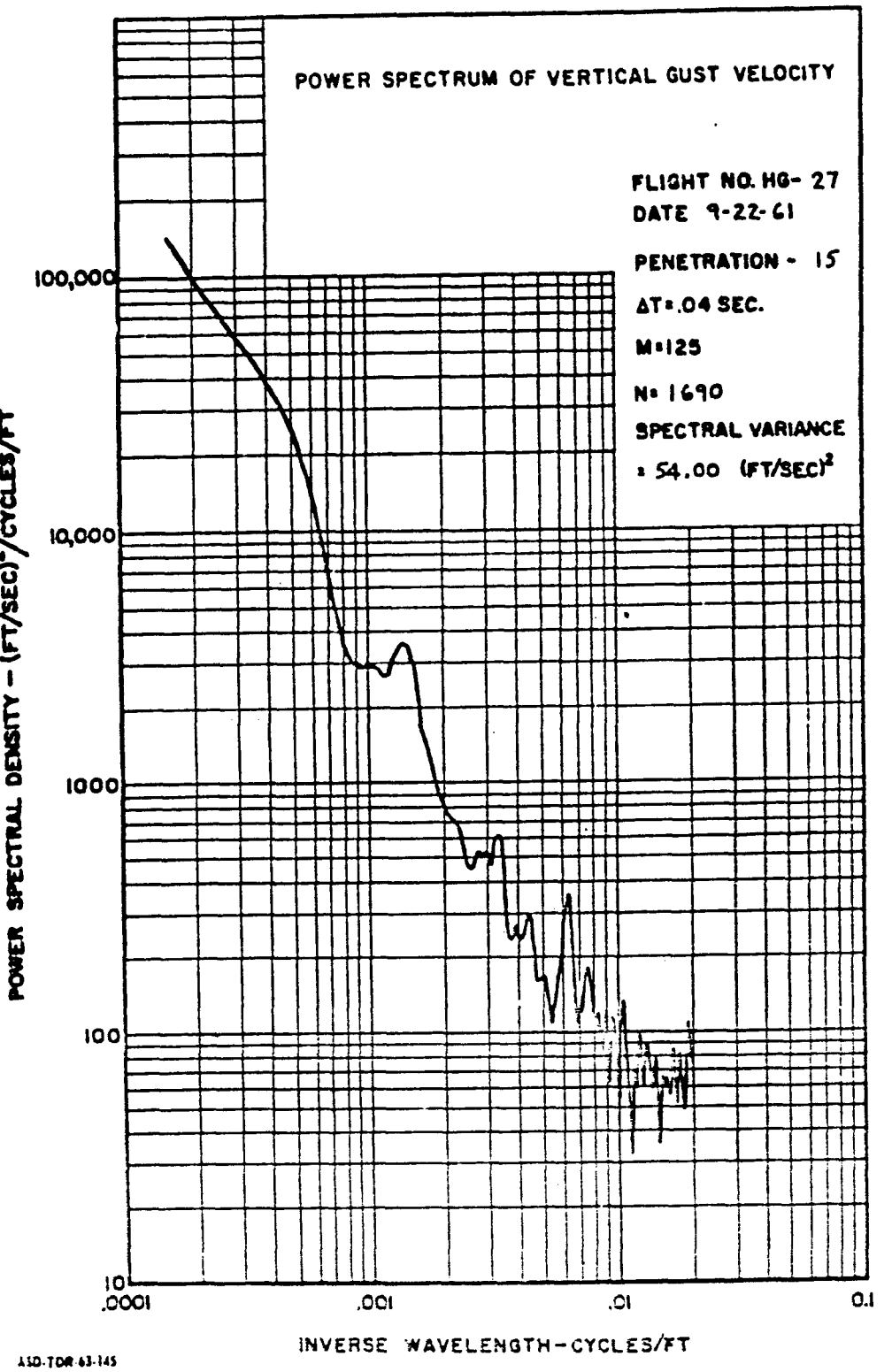

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 1460
SPECTRAL VARIANCE
= 134.76 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

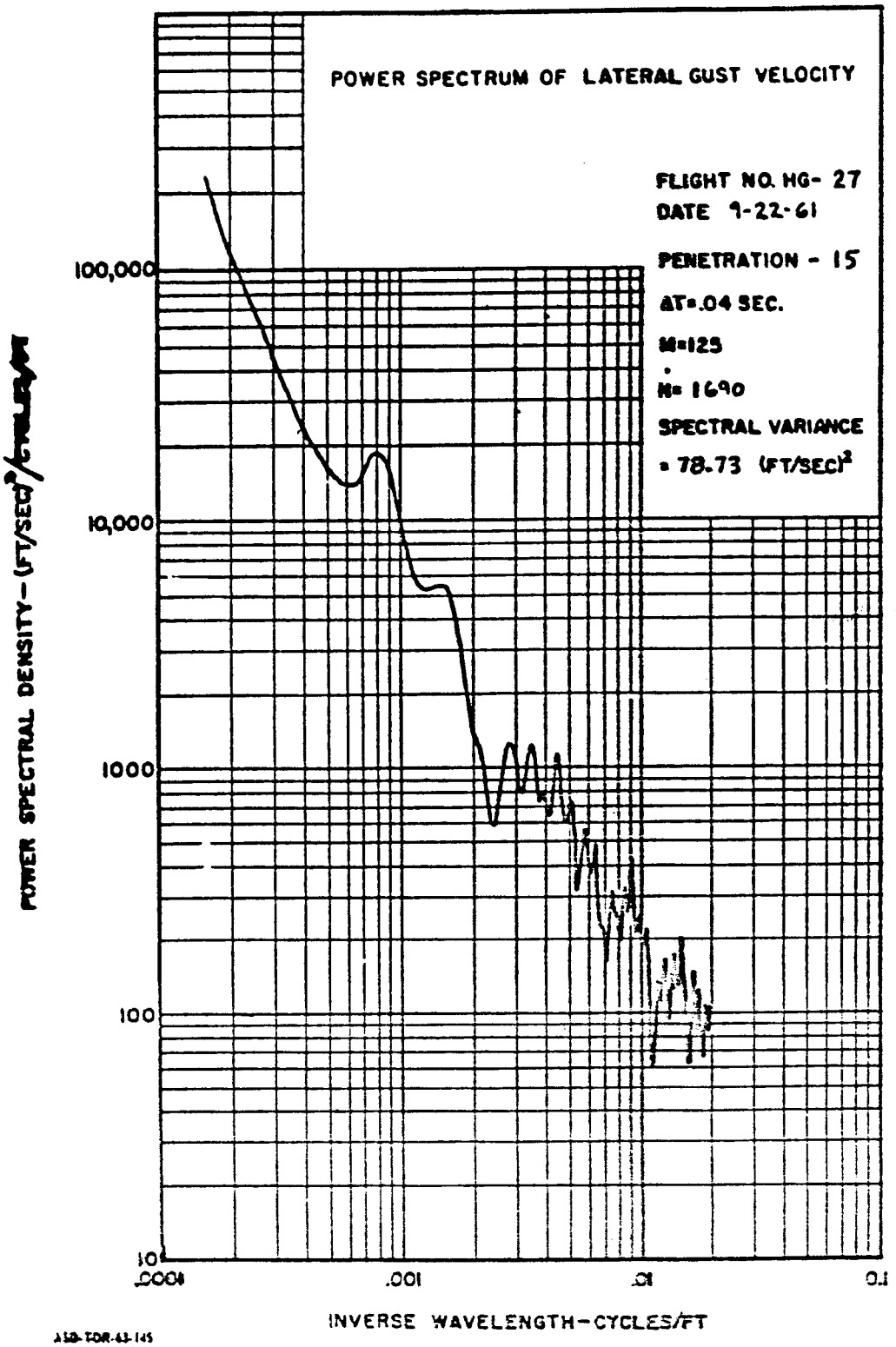

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 41.31 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

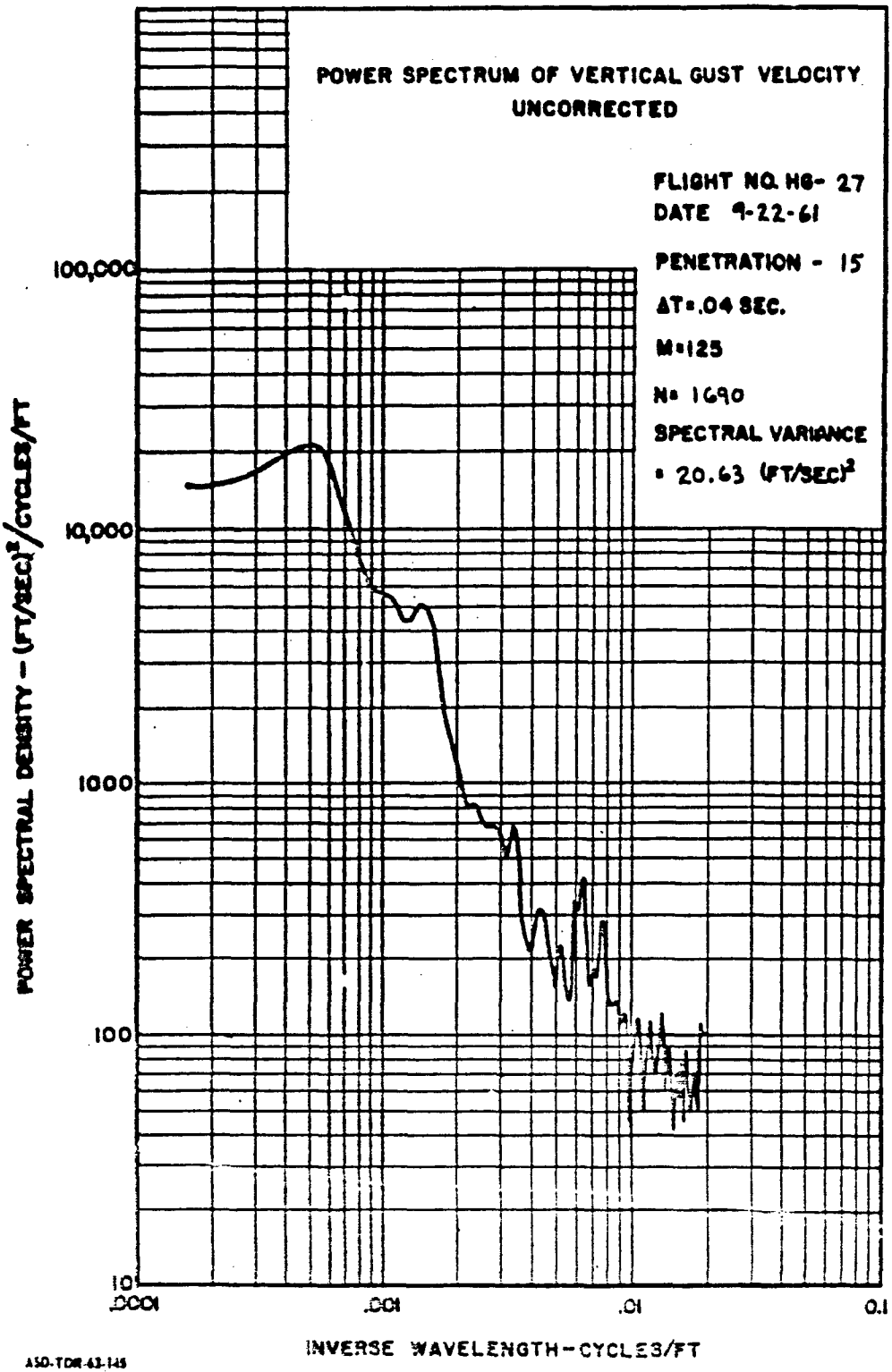

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 47.76 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

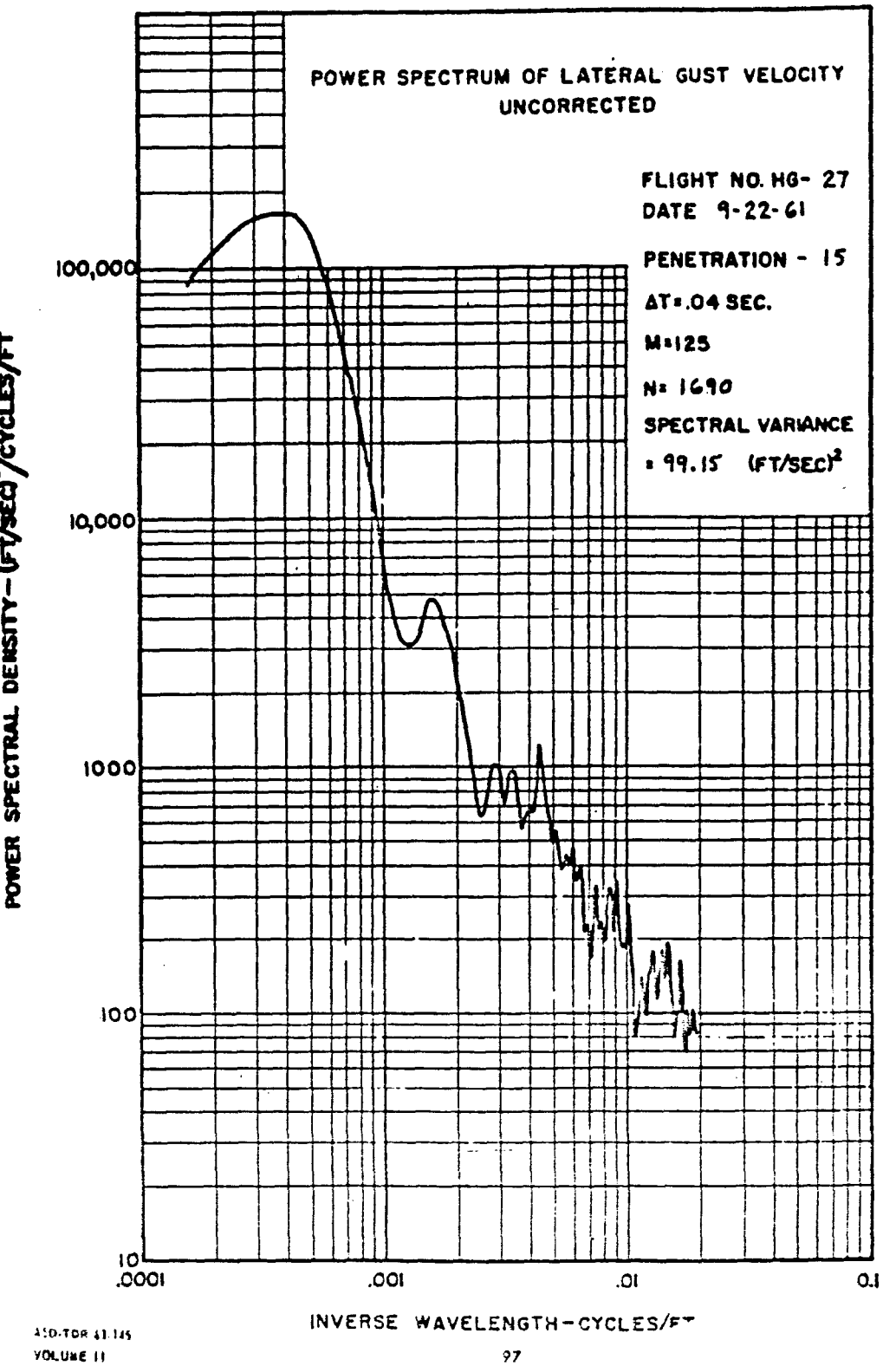

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 11.50 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

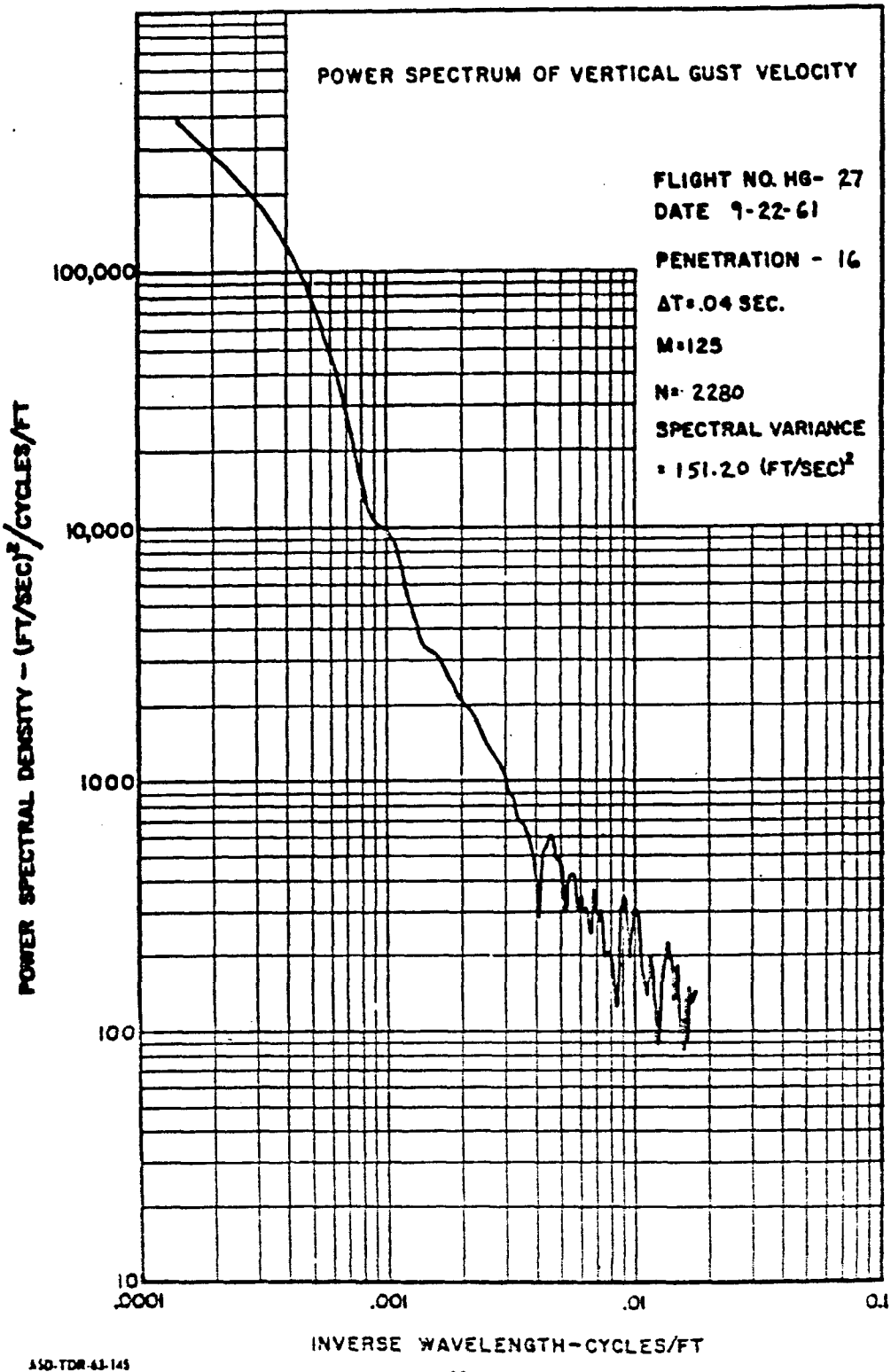

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 49.45 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

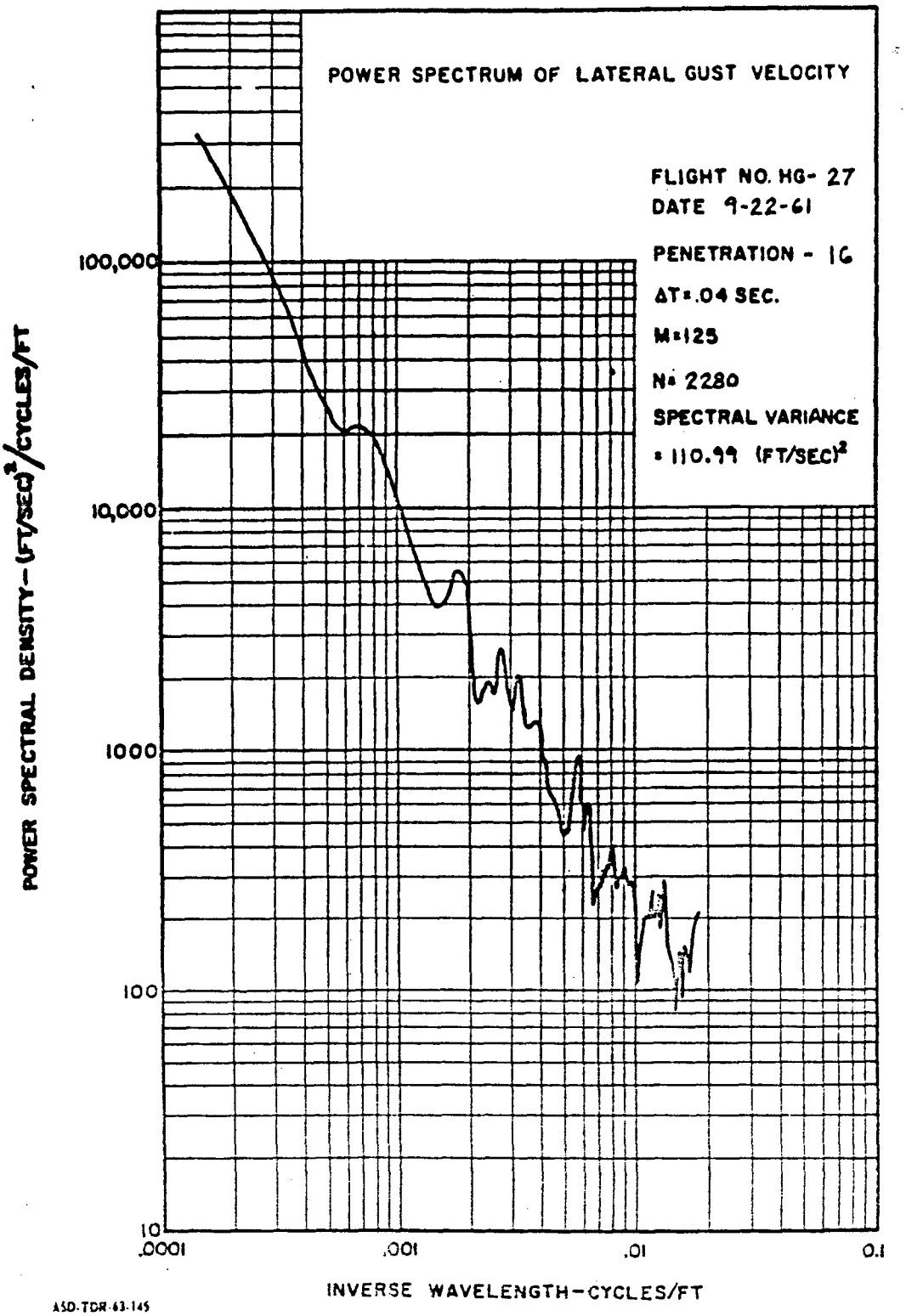

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 1690
SPECTRAL VARIANCE
= 54.00 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

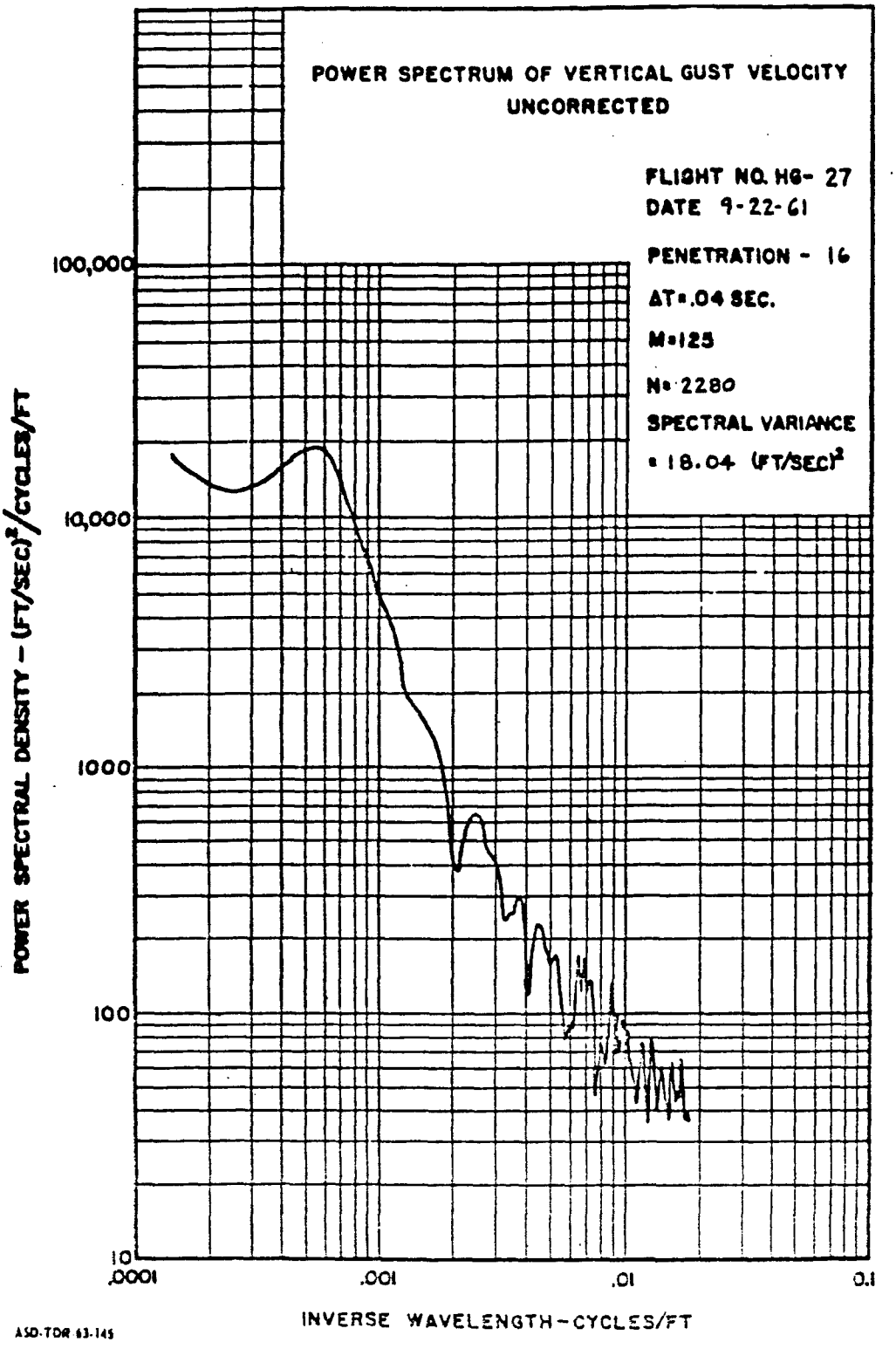

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 1690
SPECTRAL VARIANCE
= 78.73 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLE/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

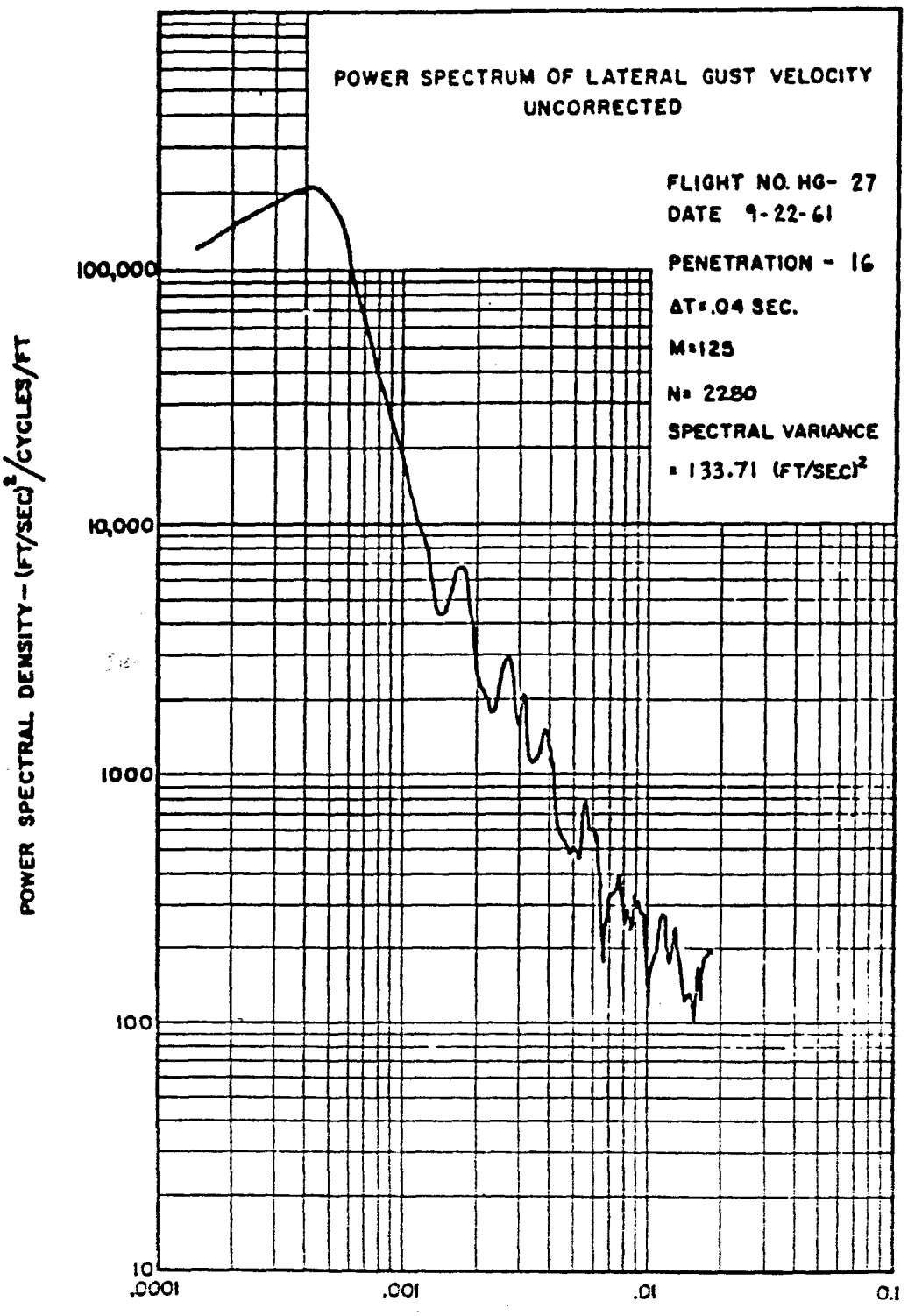

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 27
DATE 9-22-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 1690
SPECTRAL VARIANCE
= 20.63 (FT/SEC)²
100,000
10,000
1000
100
10
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

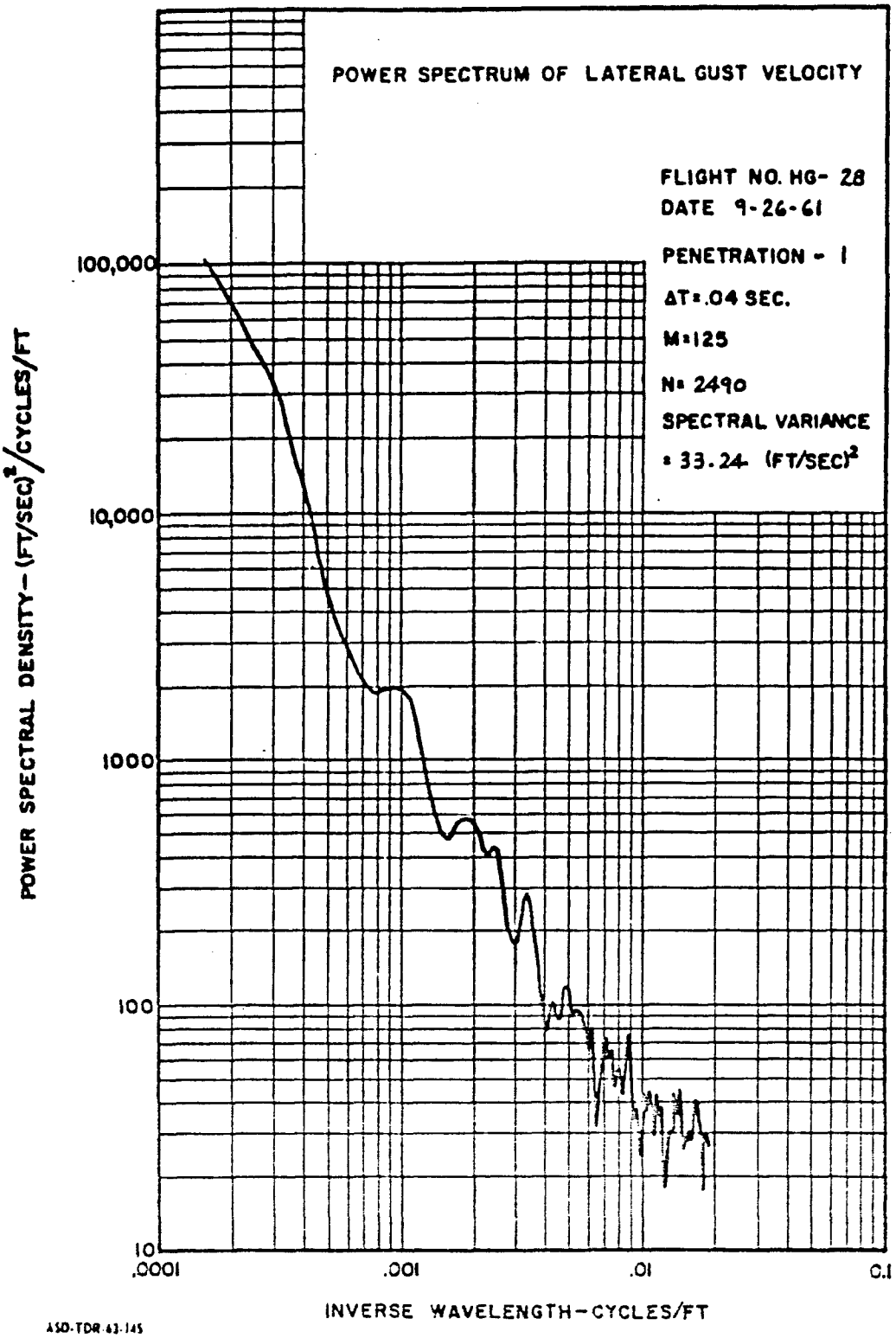

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 1690
SPECTRAL VARIANCE
= 99.15 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

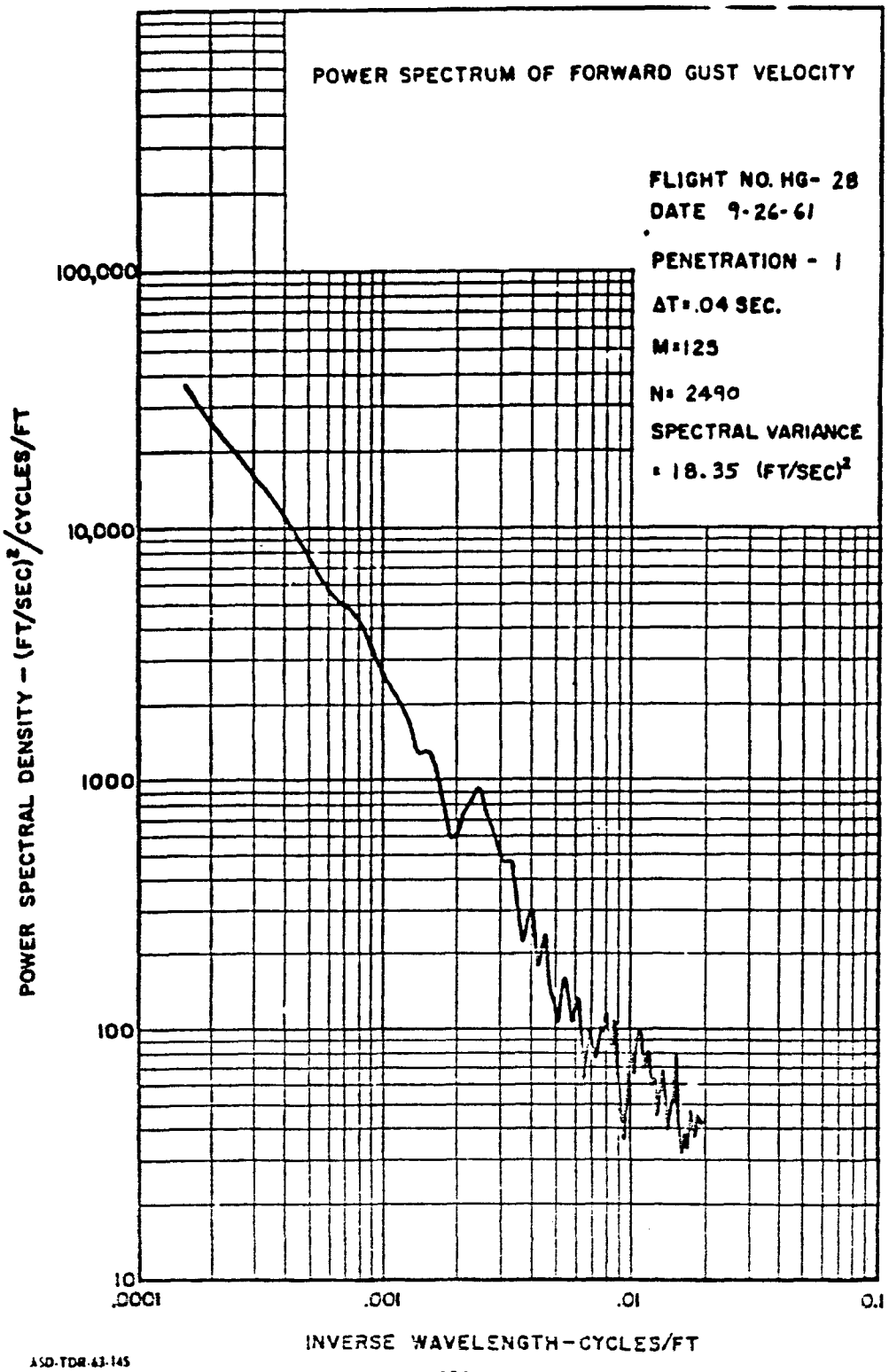

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 16
ΔT=.04 SEC.
M=125
N= 2280
SPECTRAL VARIANCE
= 151.20 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

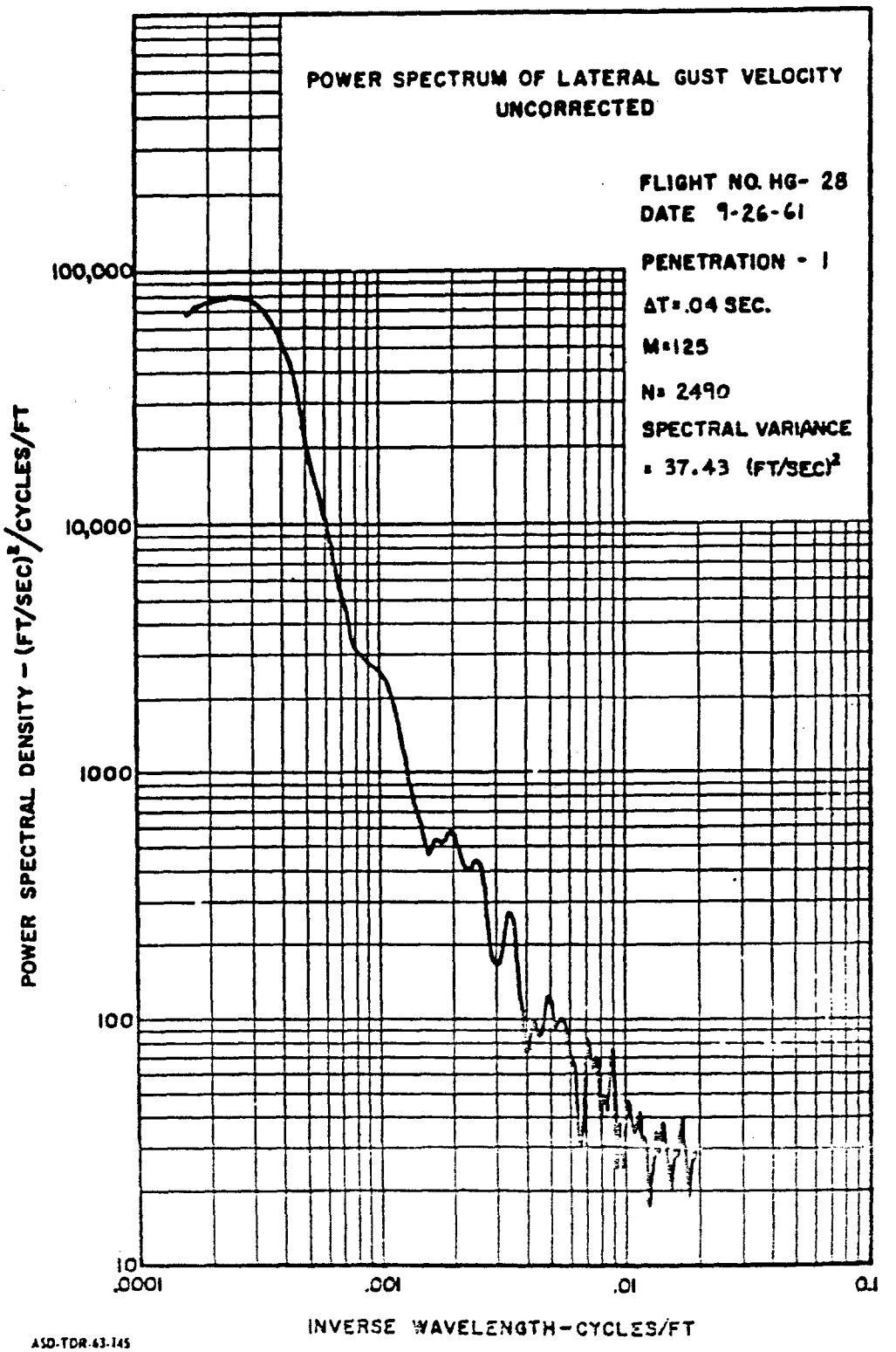

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 16
ΔT=.04 SEC.
M=125
N= 2280
SPECTRAL VARIANCE
= 110.99 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

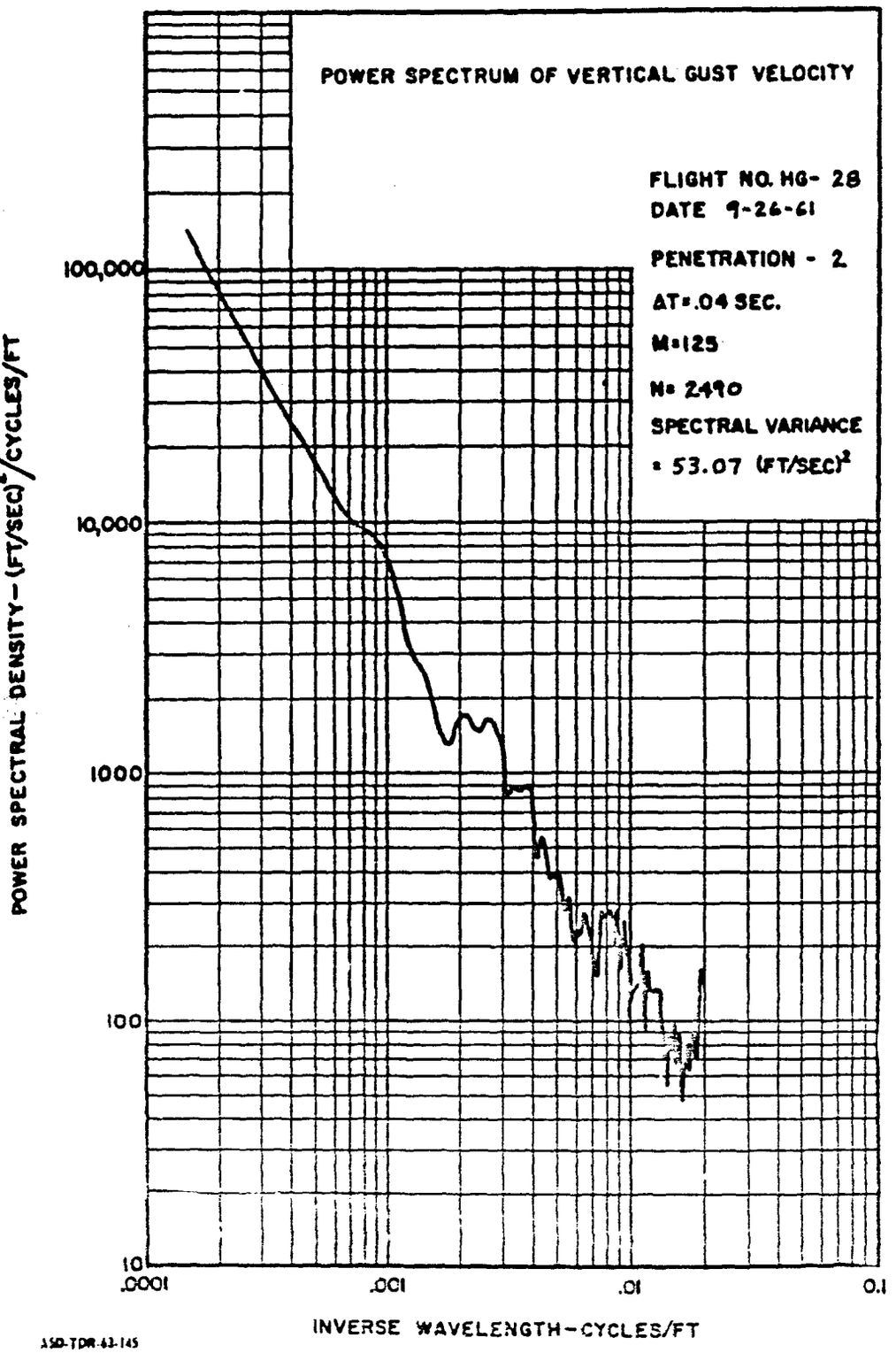

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 16
ΔT=.04 SEC.
M=125
N=2280
SPECTRAL VARIANCE
= 18.04 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

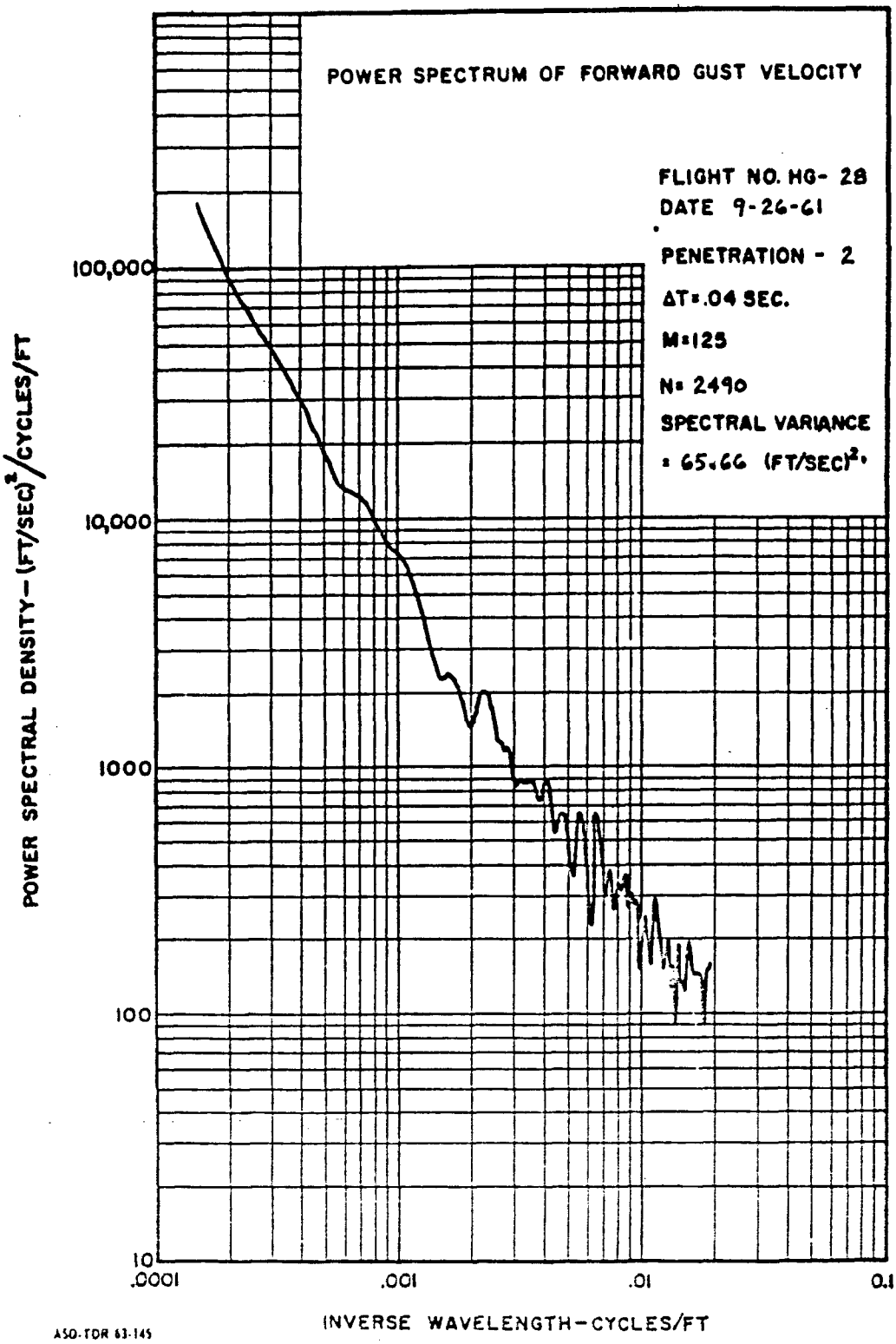

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 27
DATE 9-22-61
PENETRATION - 16
ΔT=.04 SEC.
M=125
N= 2280
SPECTRAL VARIANCE
= 133.71 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

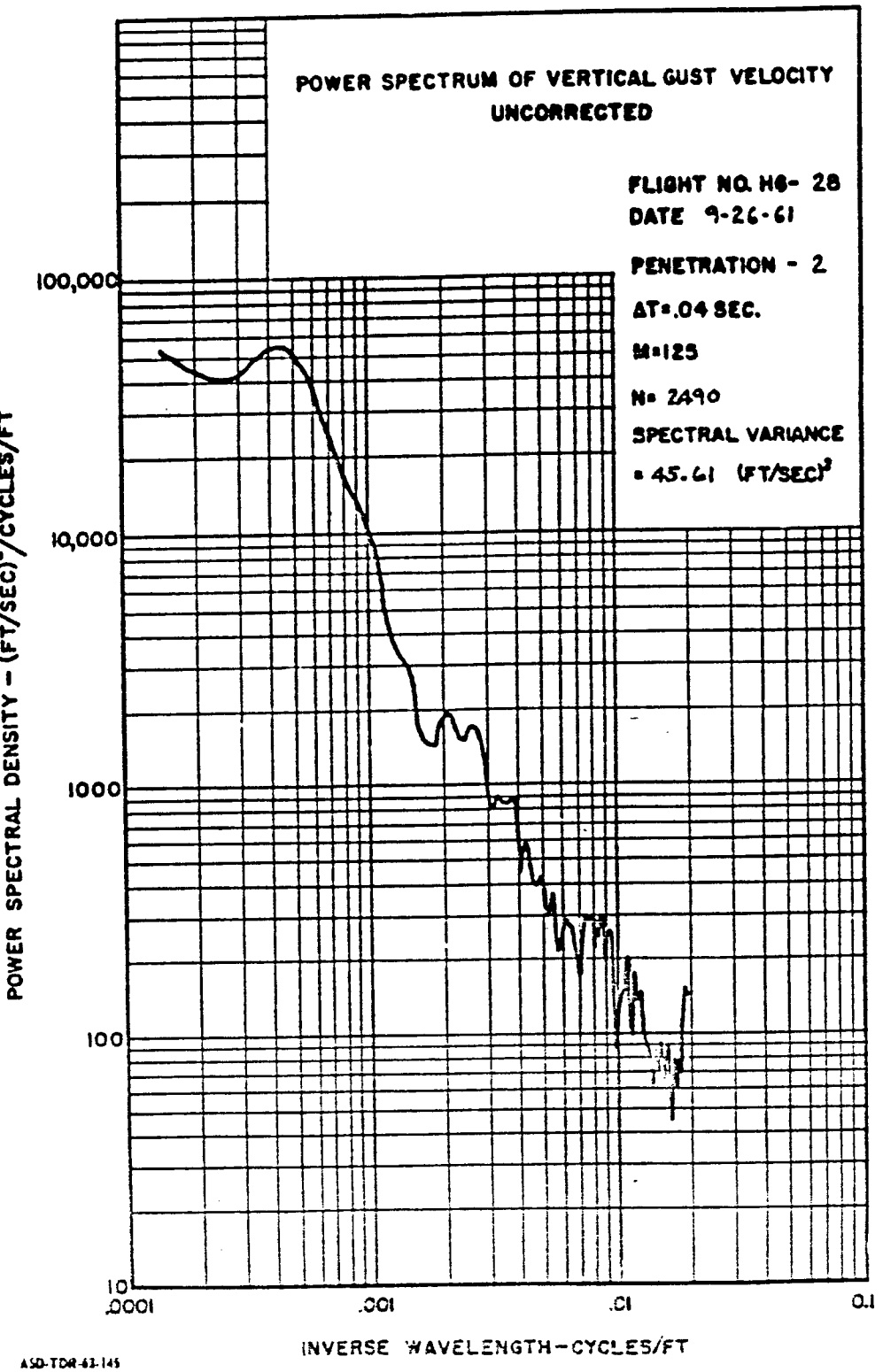

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2490
SPECTRAL VARIANCE
= 33.24 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

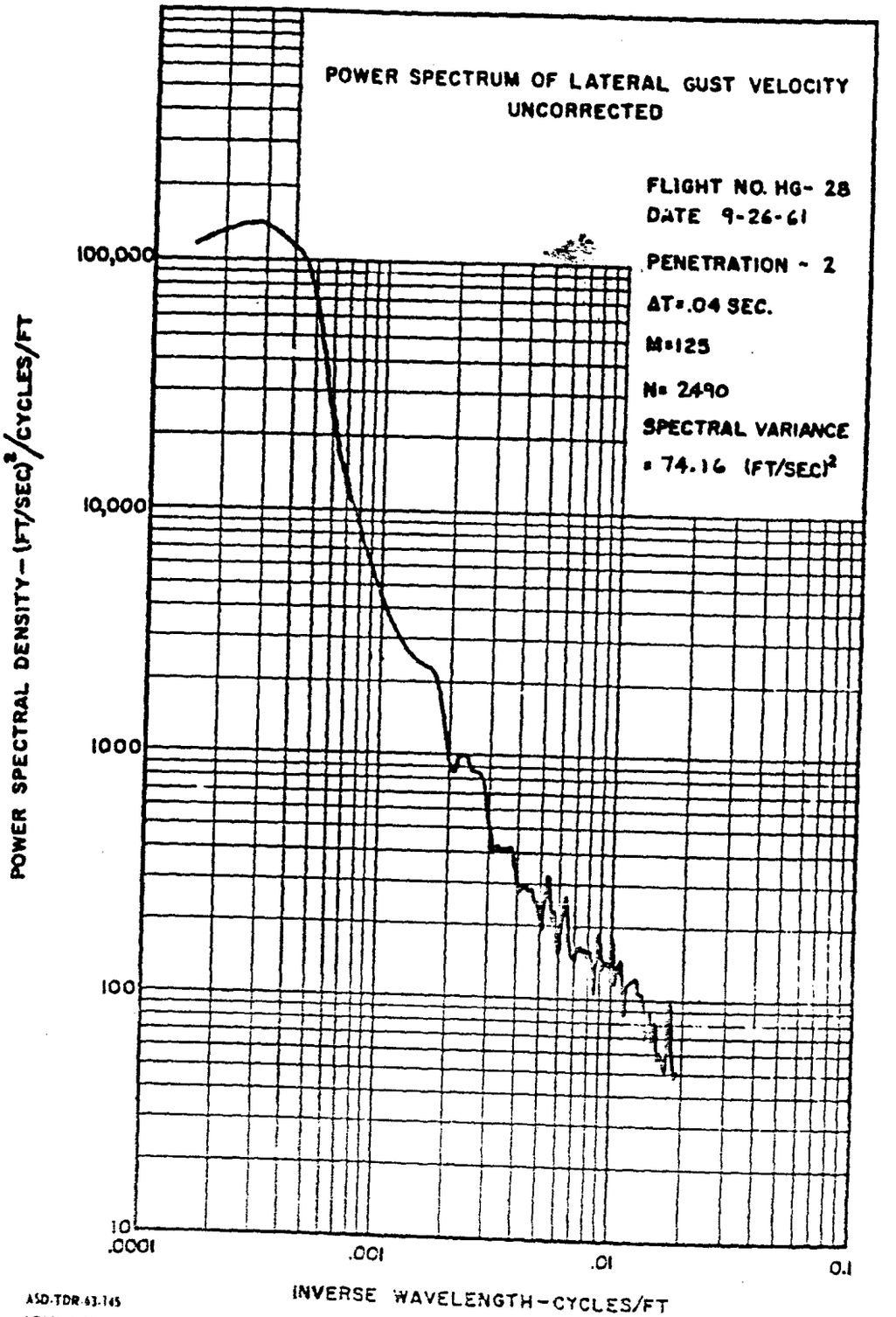

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2490
SPECTRAL VARIANCE
= 18.35 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH–CYCLES/FT

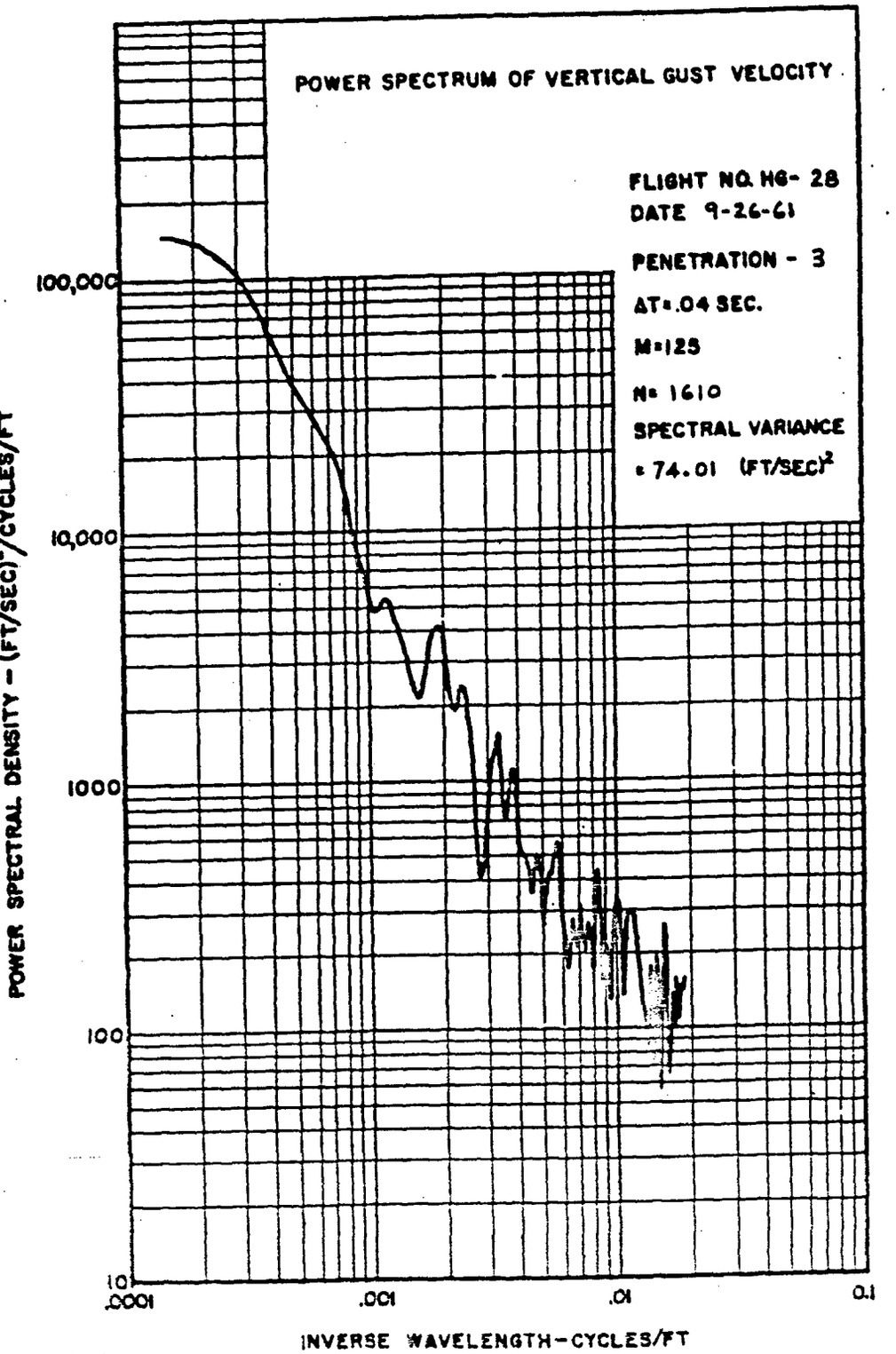

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2490
SPECTRAL VARIANCE
= 37.43 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

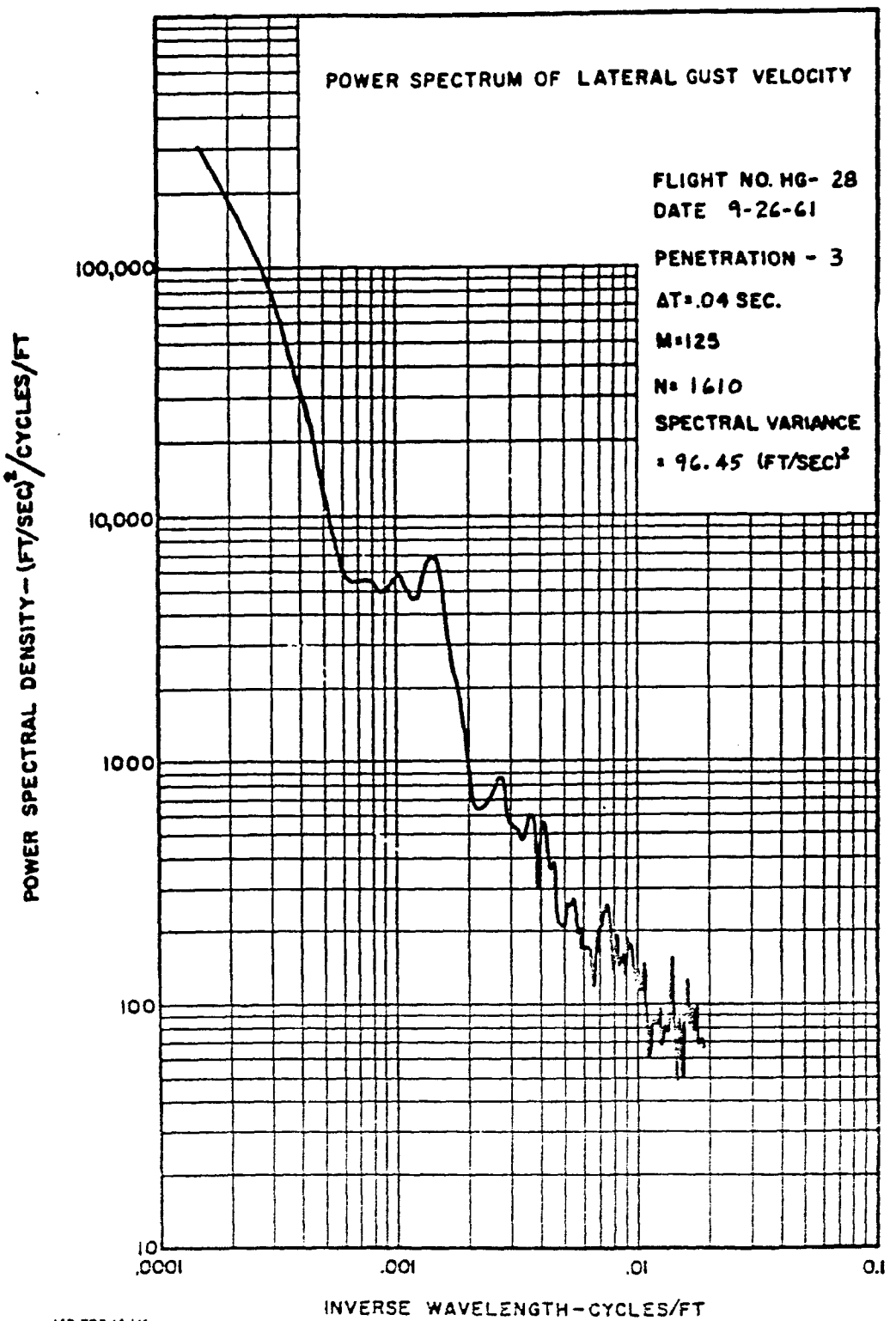

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2490
SPECTRAL VARIANCE
= 53.07 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

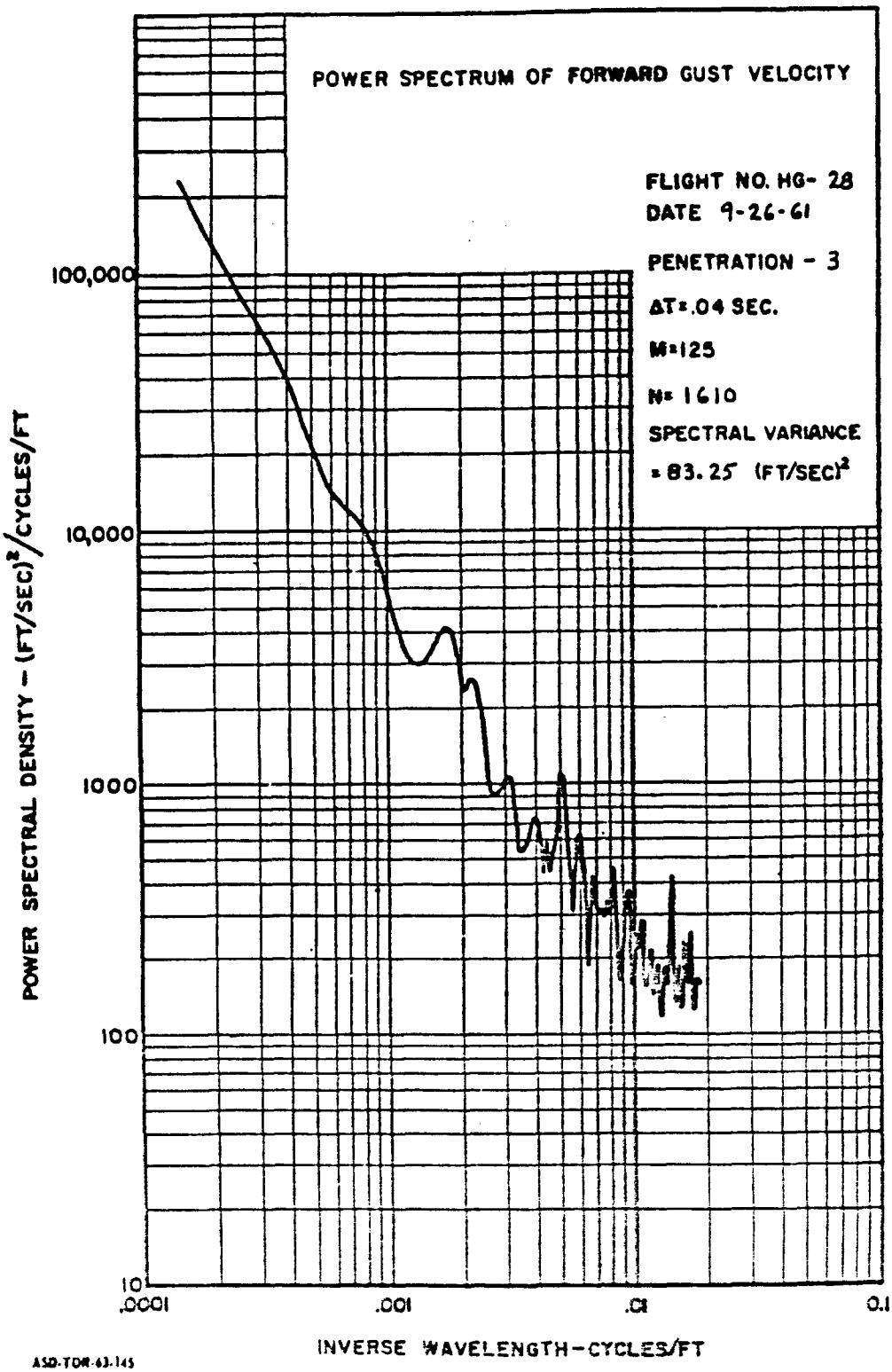

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2490
SPECTRAL VARIANCE
= 65.66 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

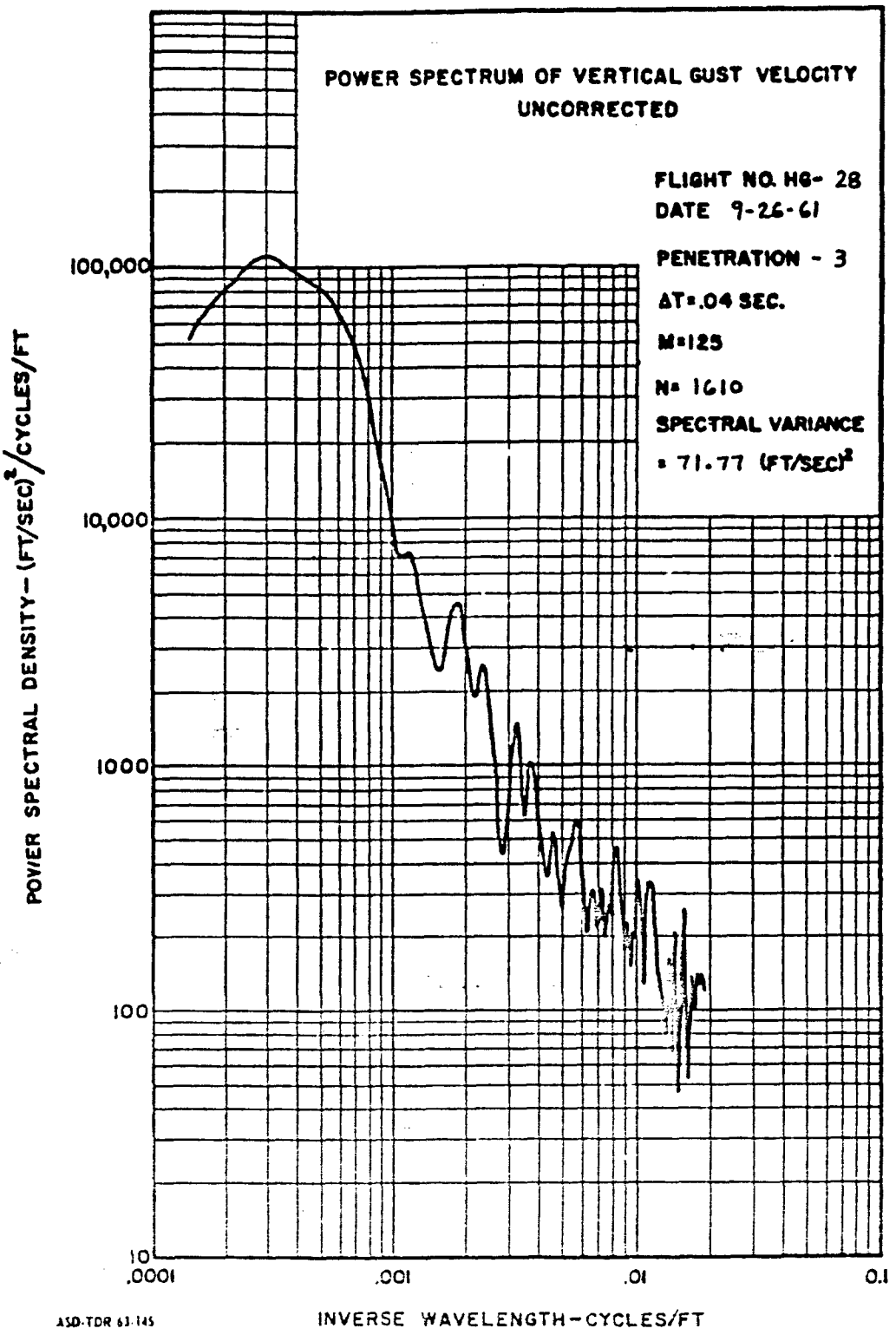

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 28
DATE 9-26-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2490
SPECTRAL VARIANCE
= 45.61 (FT/SEC)²
100,000
10,000
1000
100
10
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

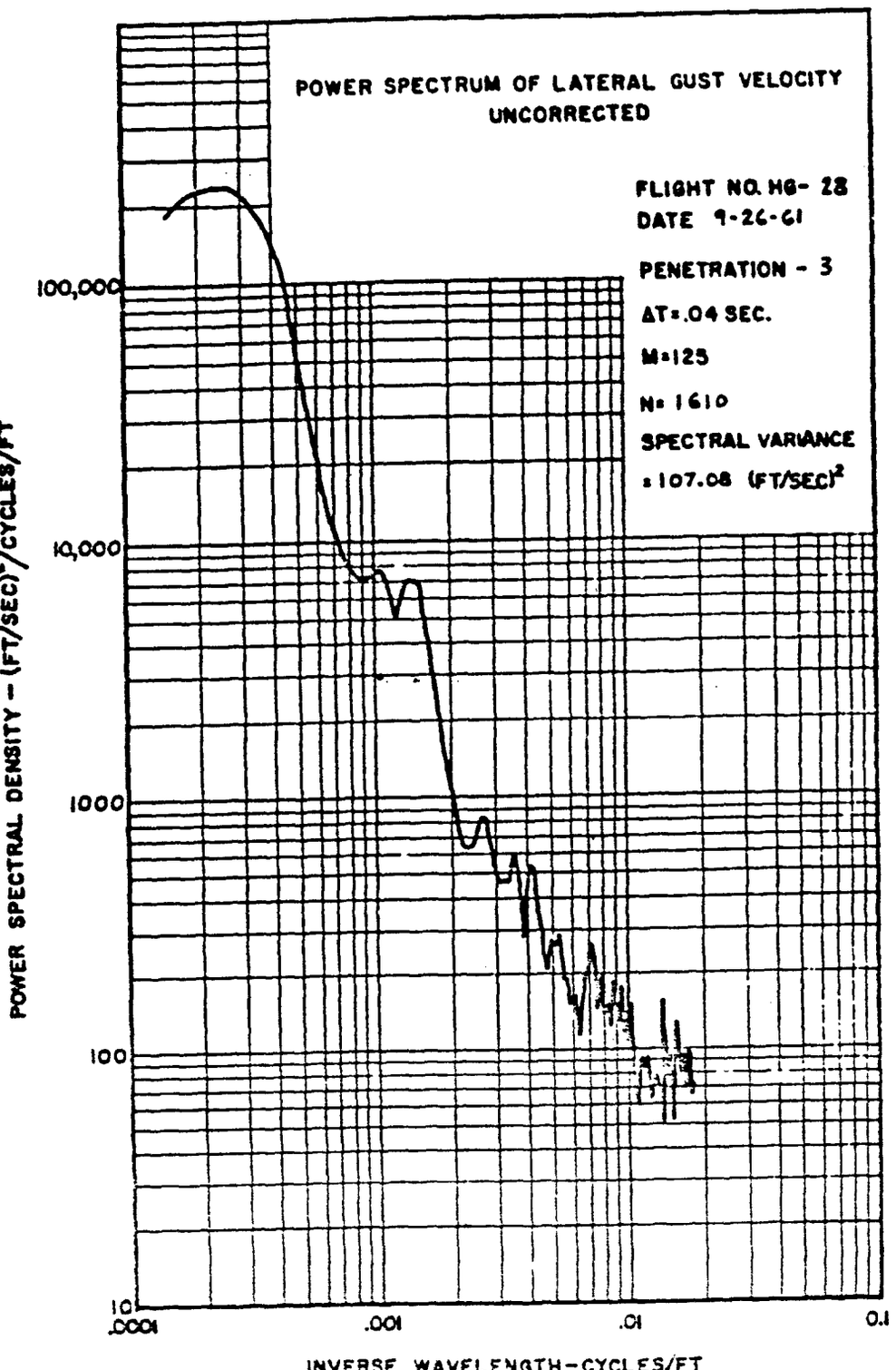

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2490
SPECTRAL VARIANCE
= 74.16 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

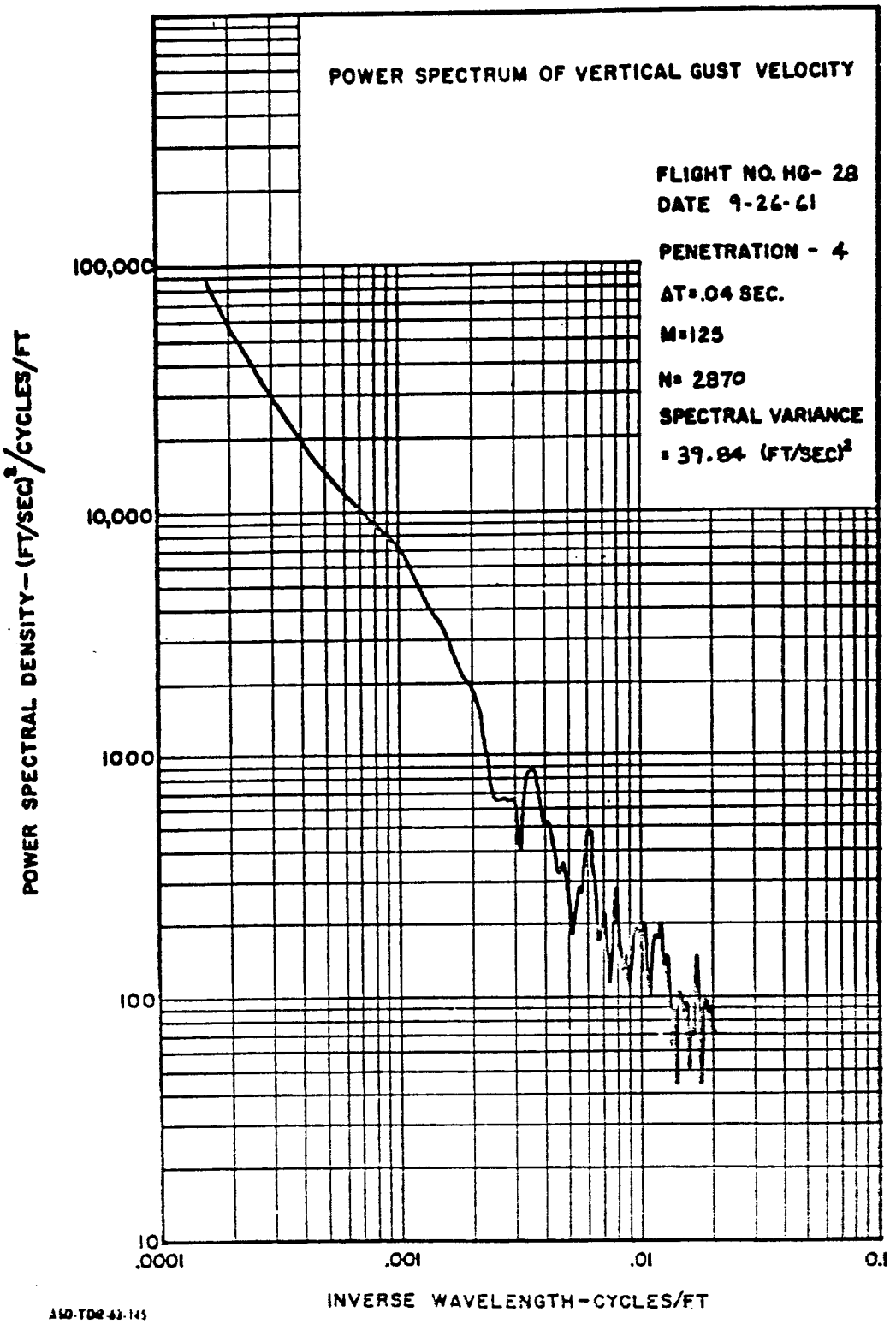

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1610
SPECTRAL VARIANCE
= 74.01 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

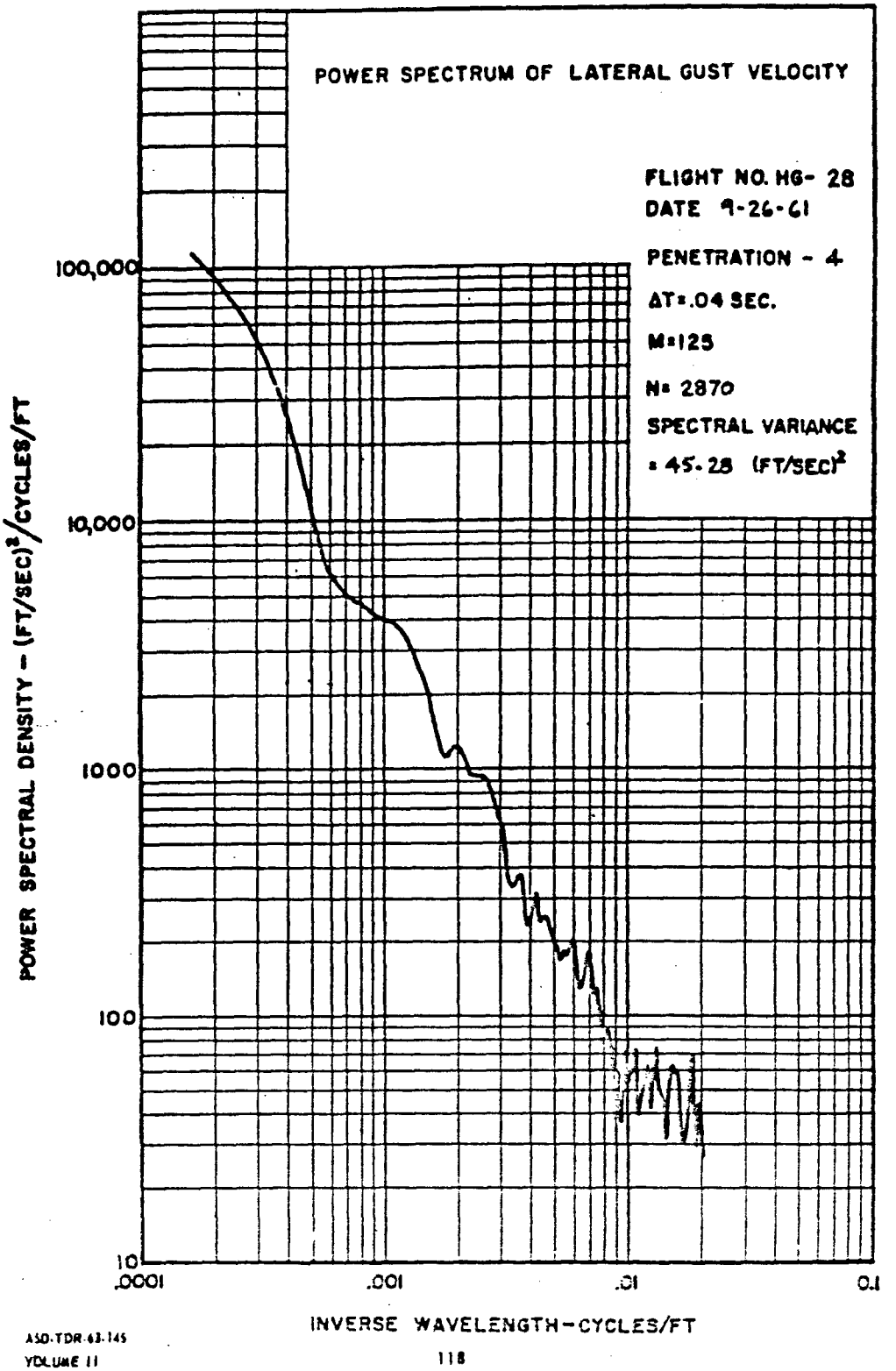

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1610
SPECTRAL VARIANCE
= 96.45 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

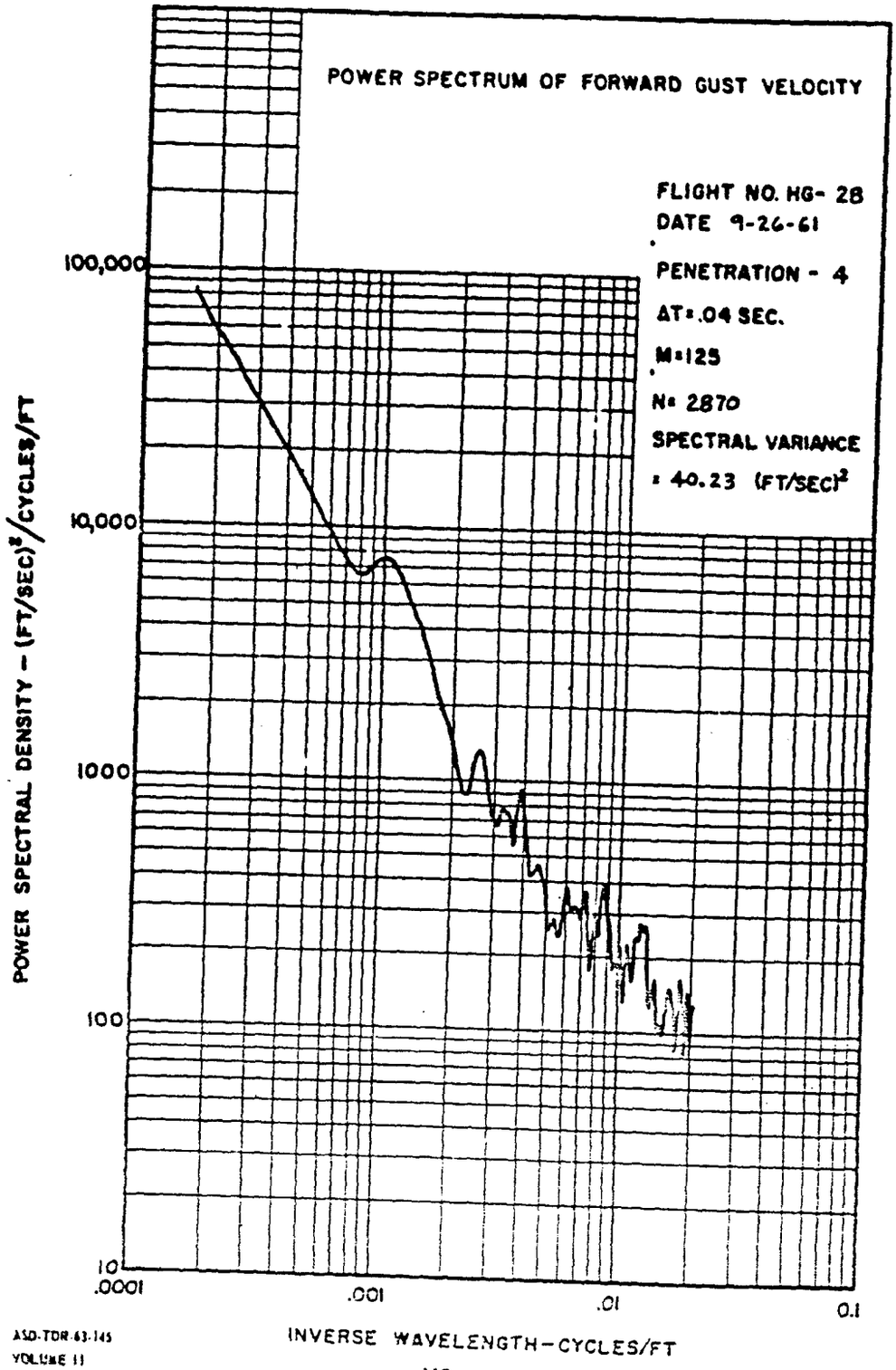

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1610
SPECTRAL VARIANCE
=83.25 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

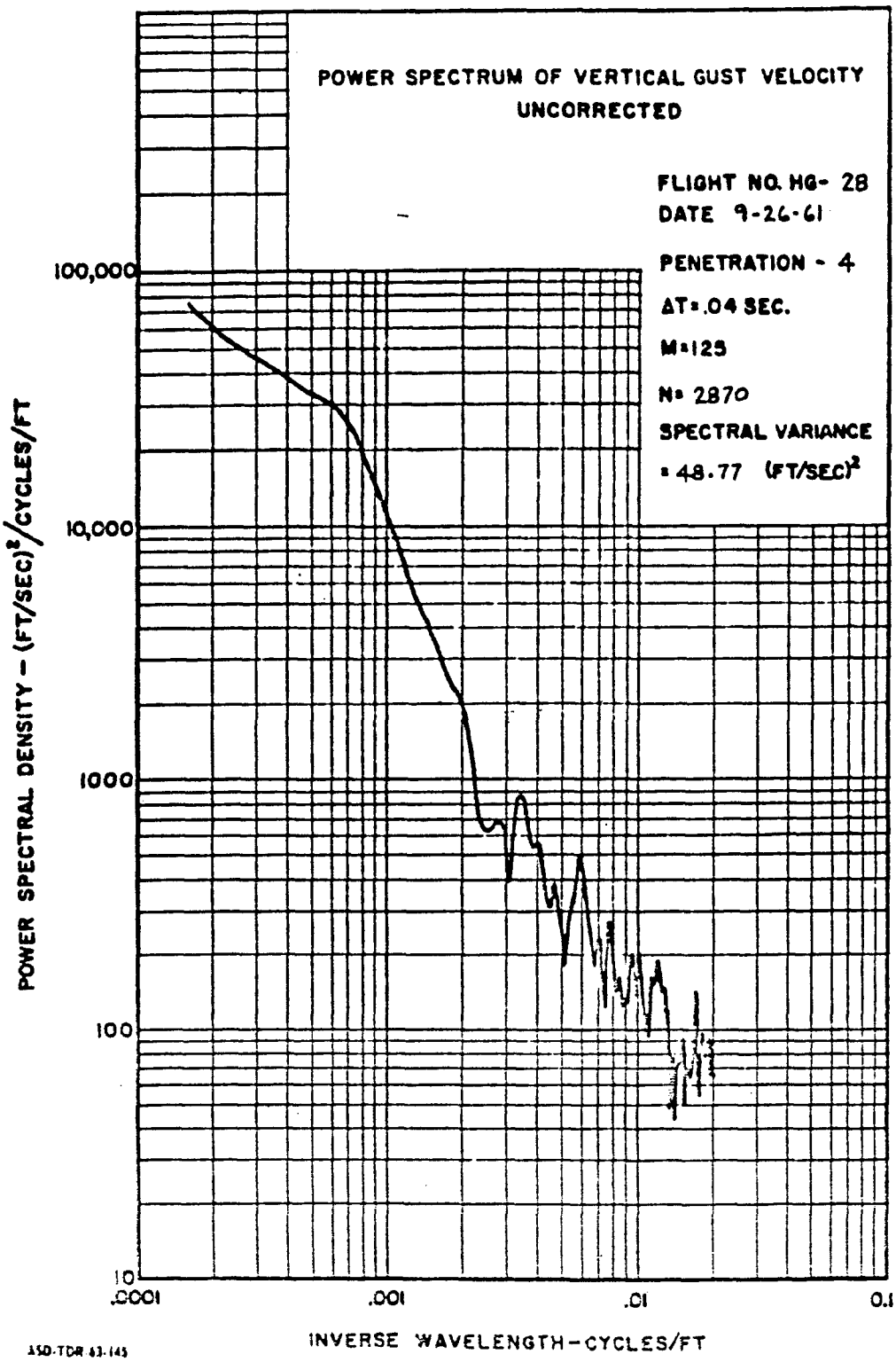

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1610
SPECTRAL VARIANCE
= 71.77 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

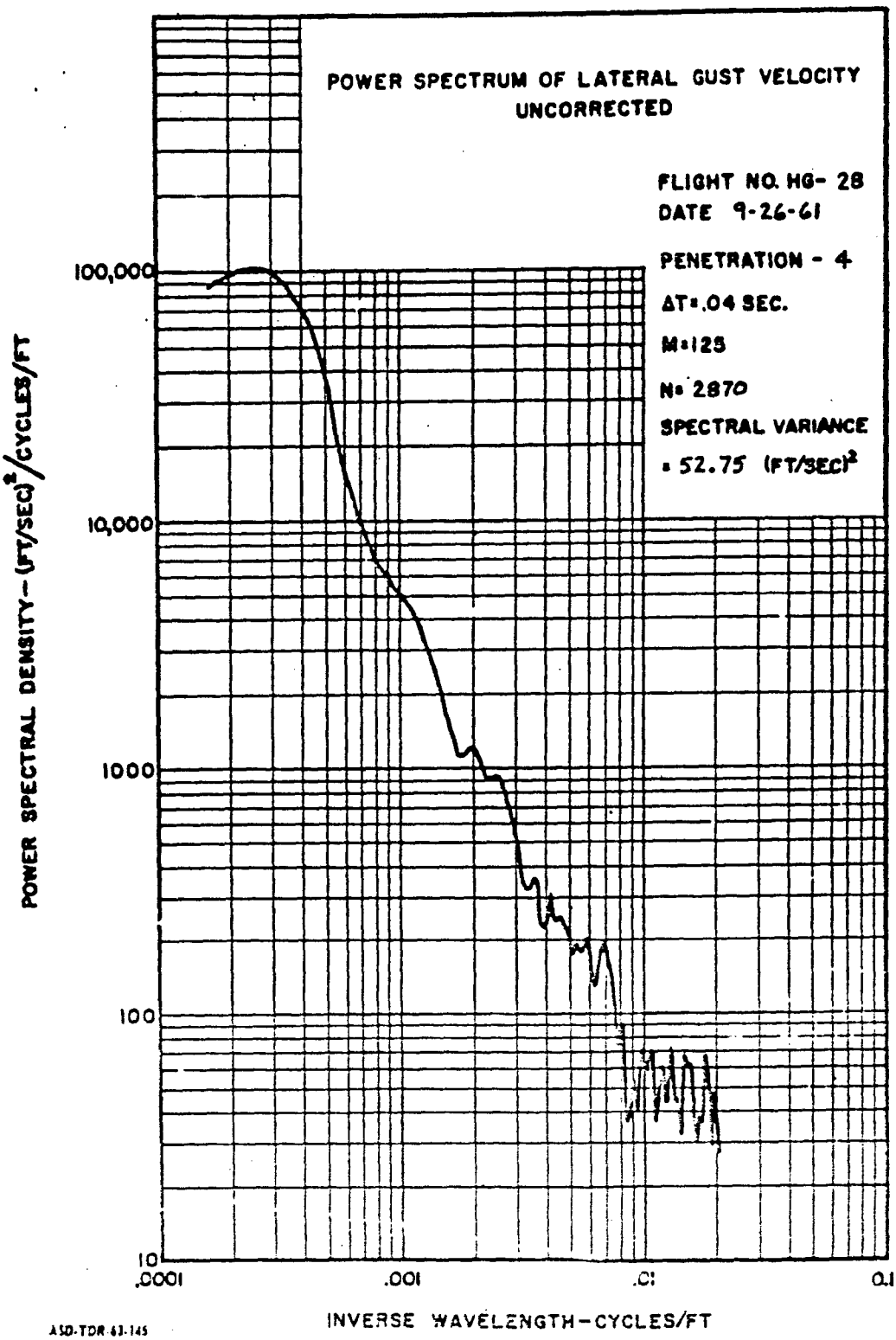

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1610
SPECTRAL VARIANCE
=107.08 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

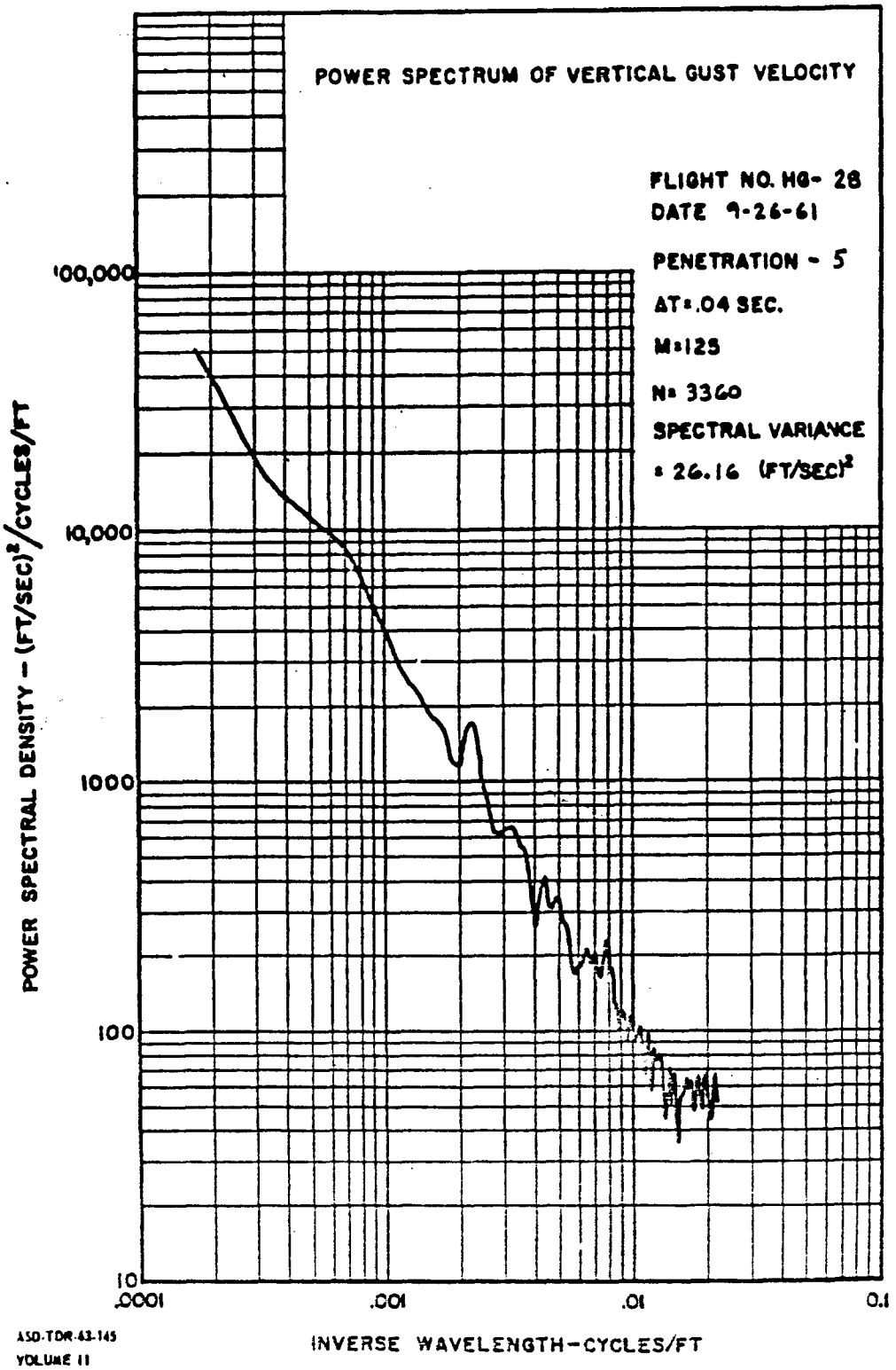

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2870
SPECTRAL VARIANCE
= 39.84 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

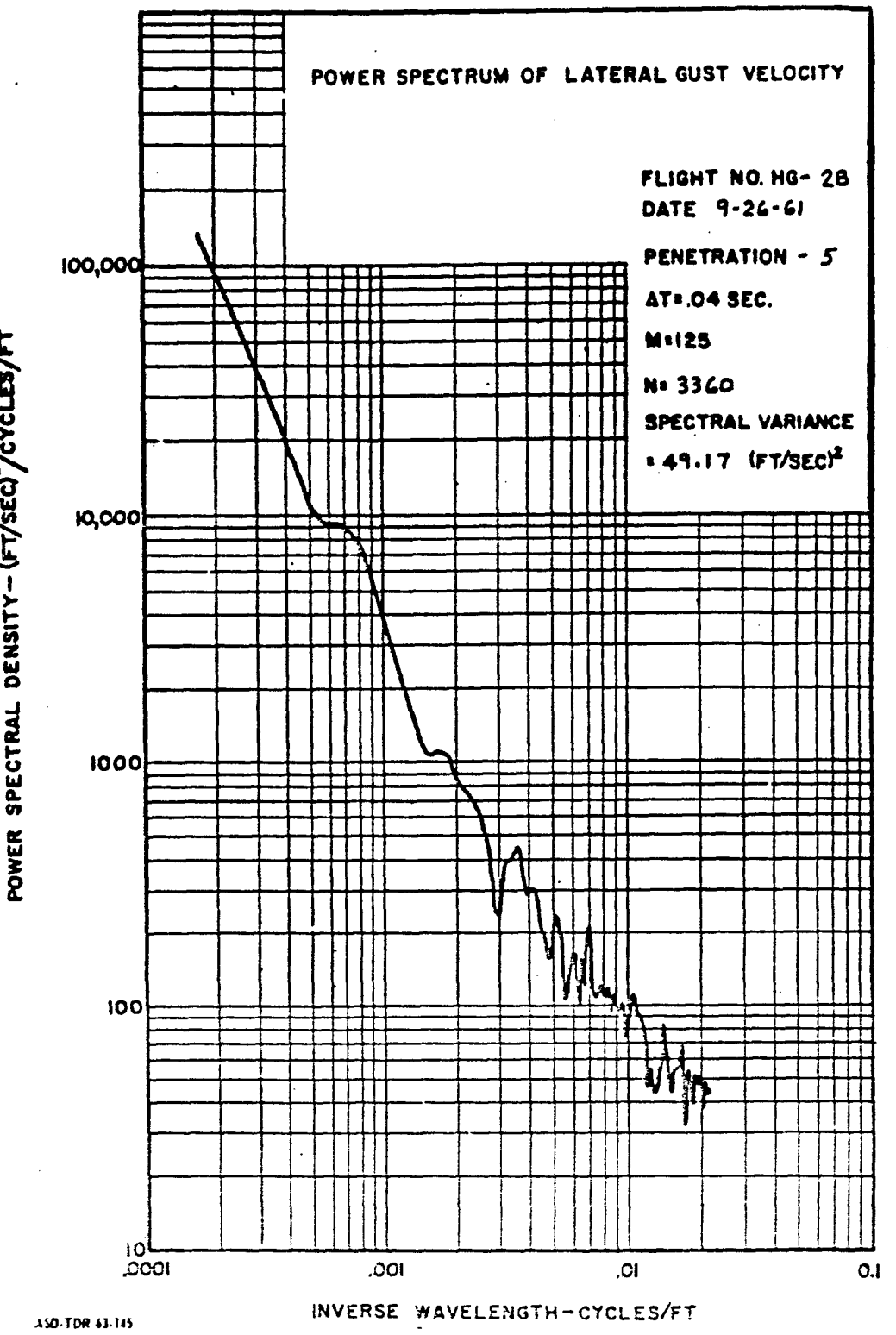

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2870
SPECTRAL VARIANCE
= 45.28 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

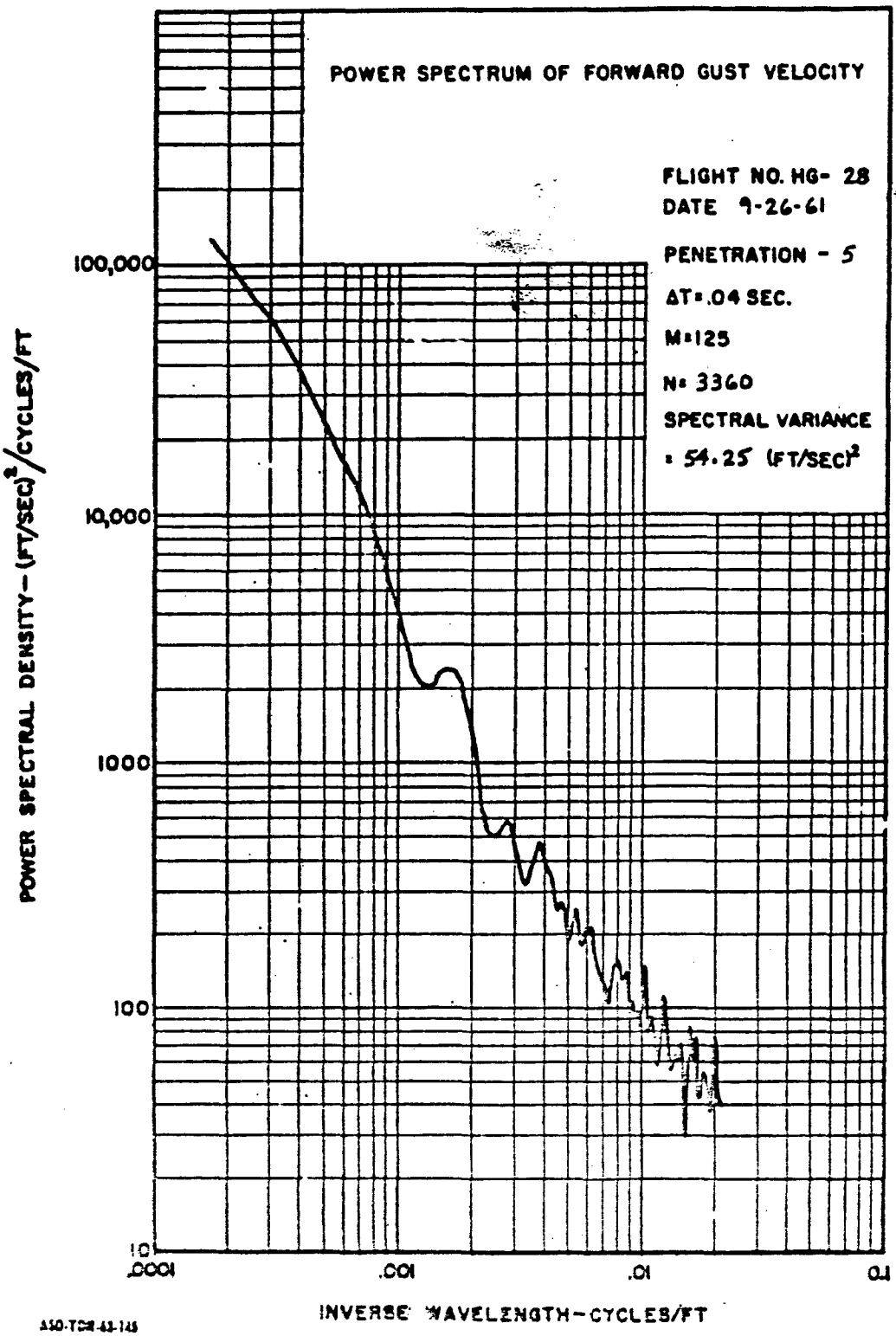

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2870
SPECTRAL VARIANCE
= 40.23 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

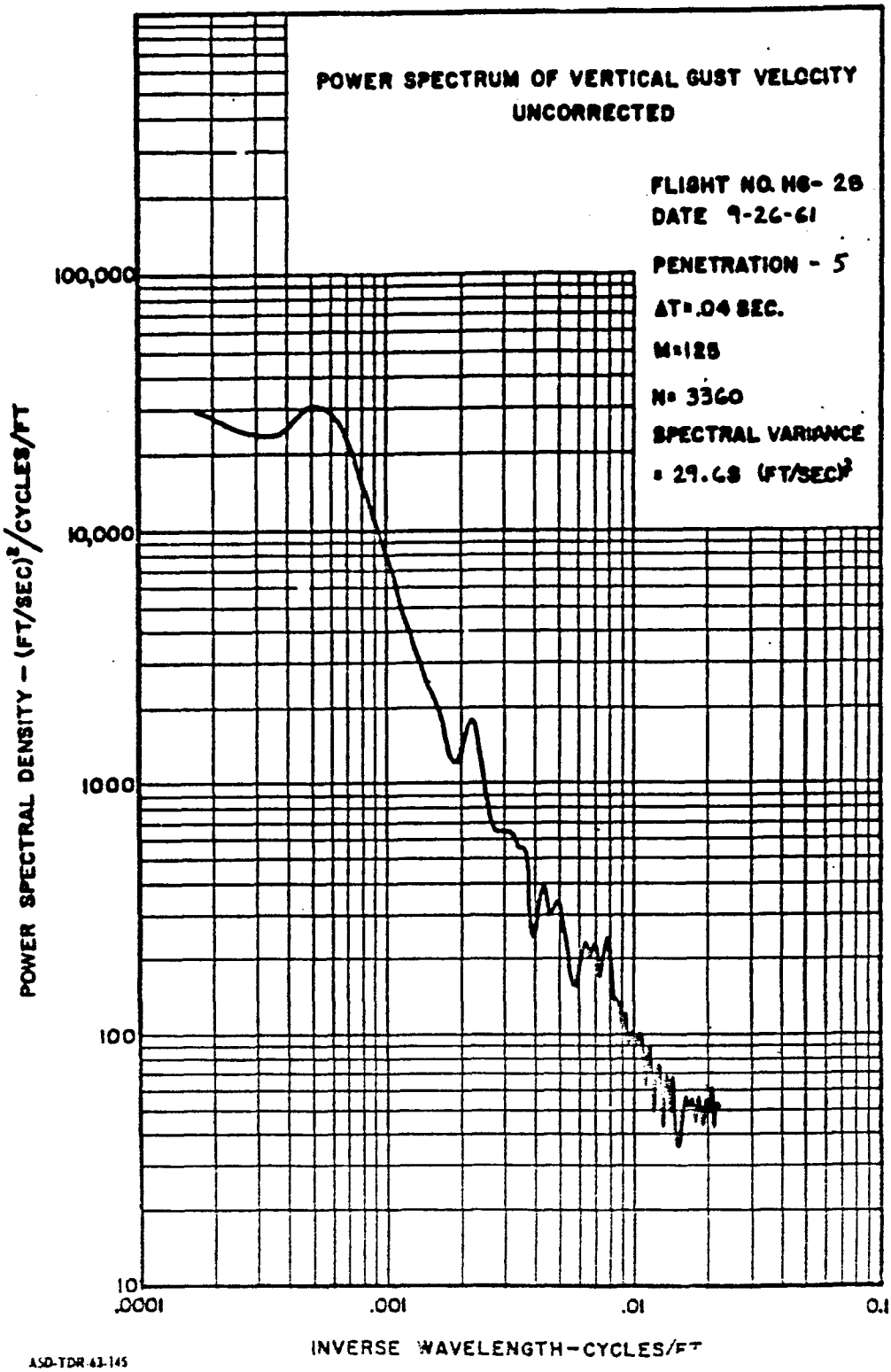

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2870
SPECTRAL VARIANCE
= 48.77 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

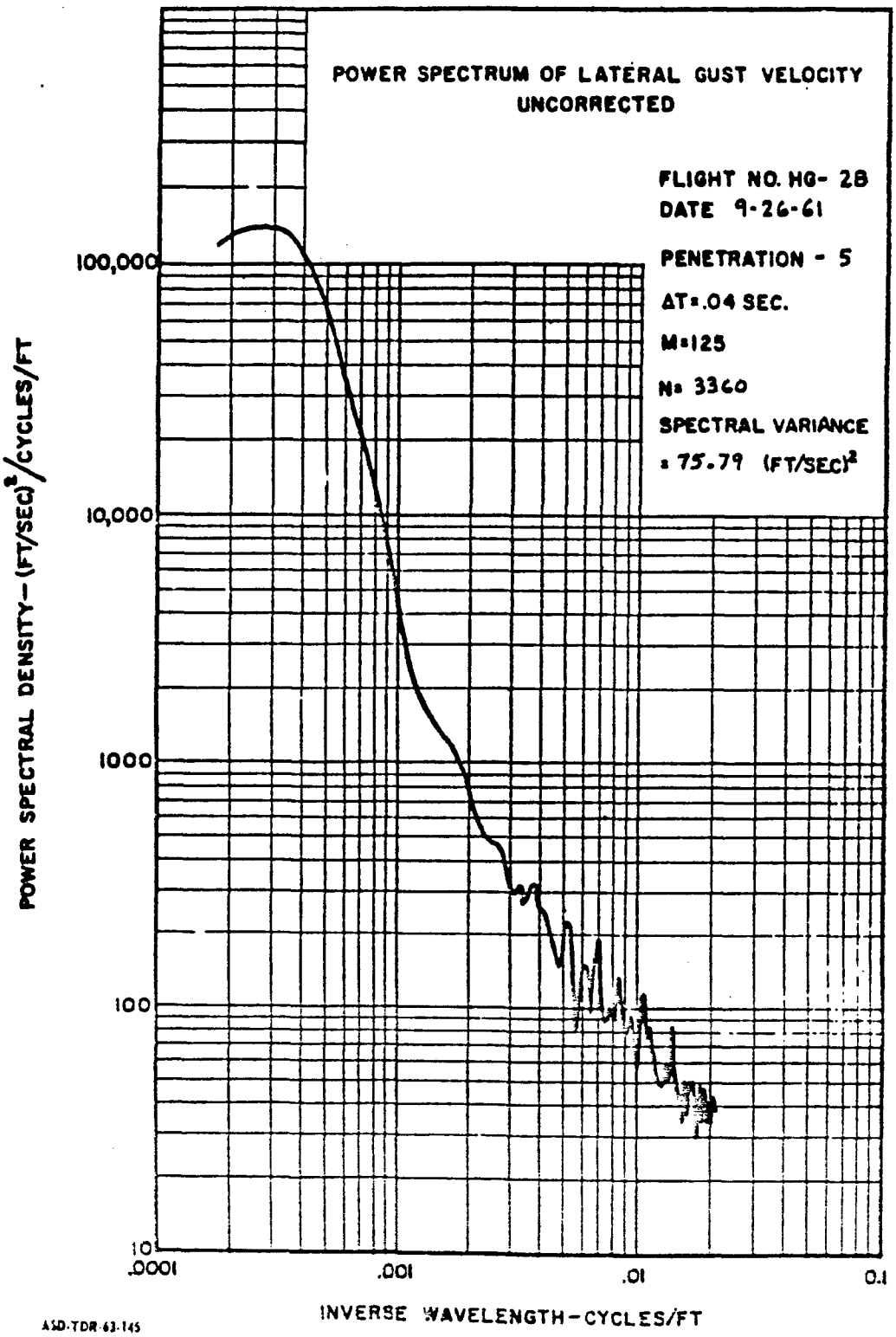

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2870
SPECTRAL VARIANCE
= 52.75 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

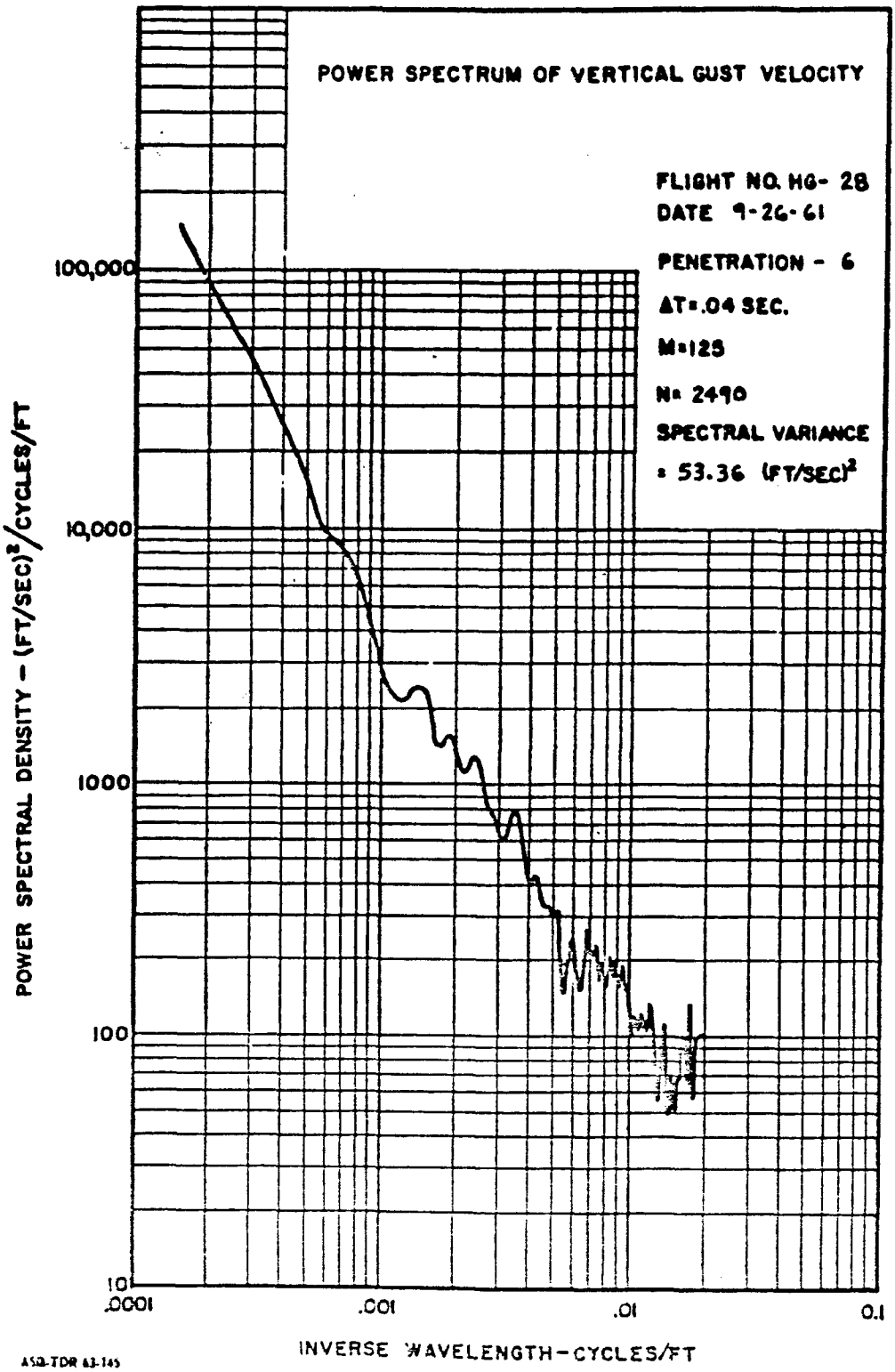

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 3360
SPECTRAL VARIANCE
= 26.16 (FT/SEC)²
100,000
10,000
1000
100
10
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

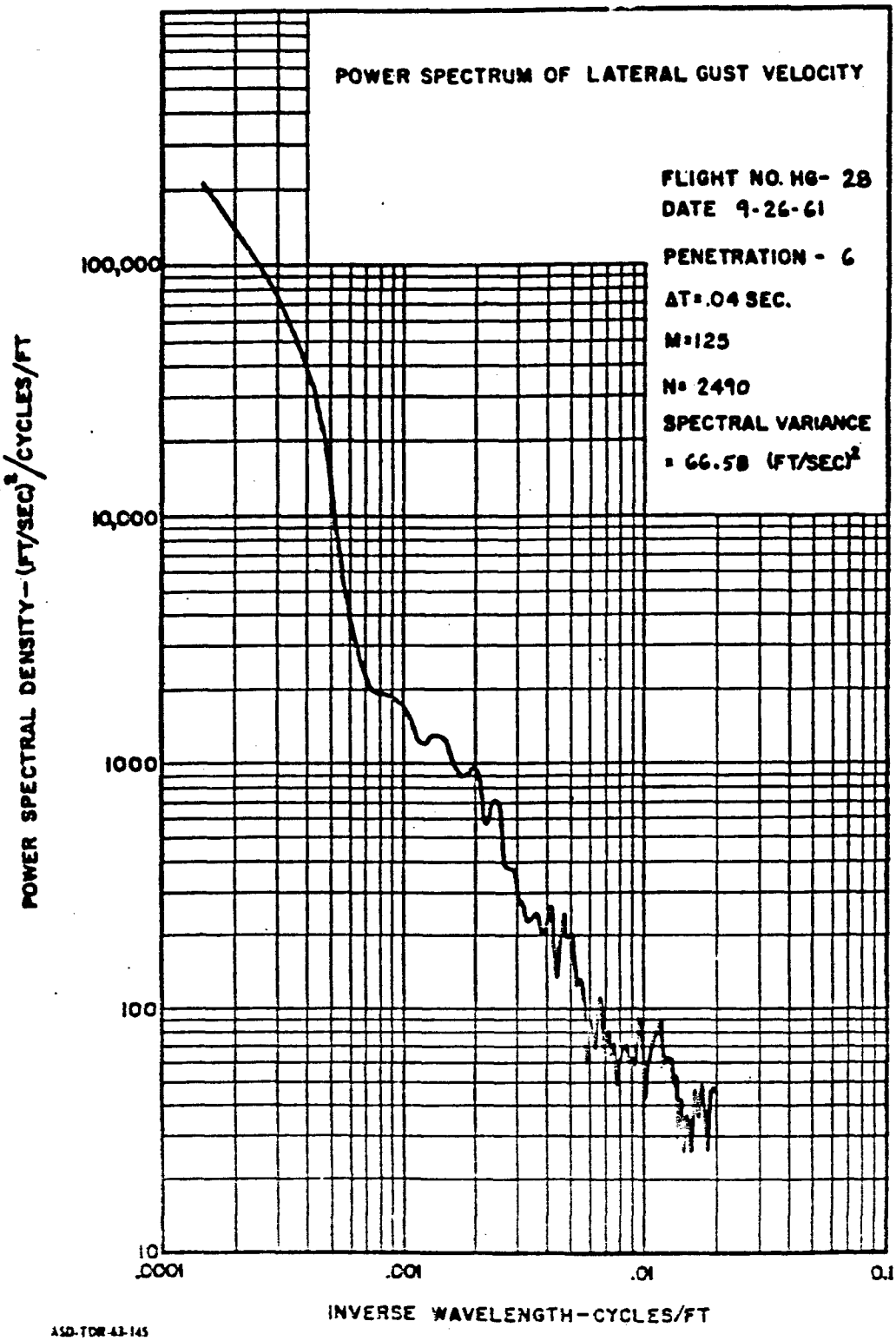

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 3360
SPECTRAL VARIANCE
=49.17 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

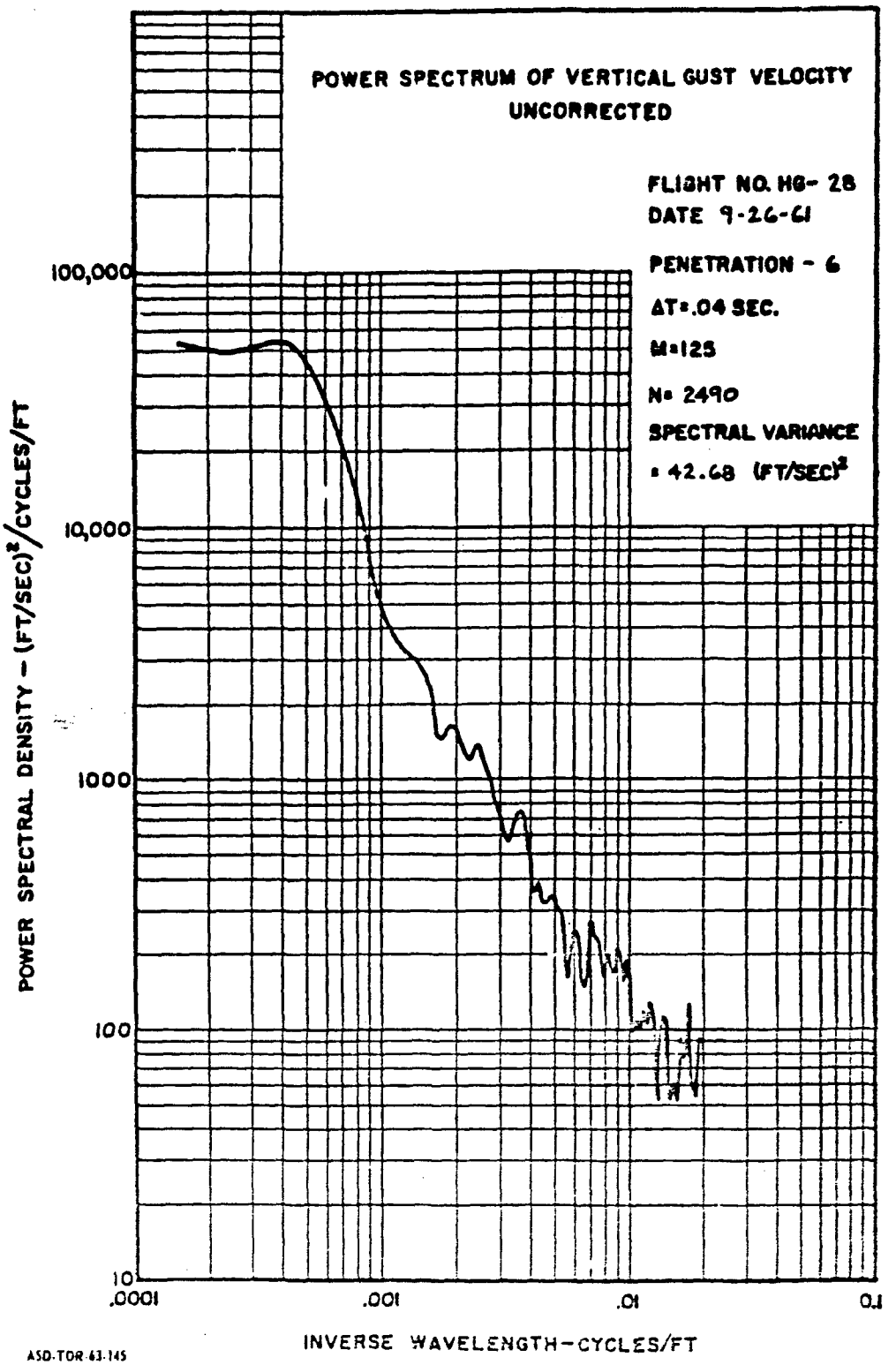

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 3360
SPECTRAL VARIANCE
= 54.25 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

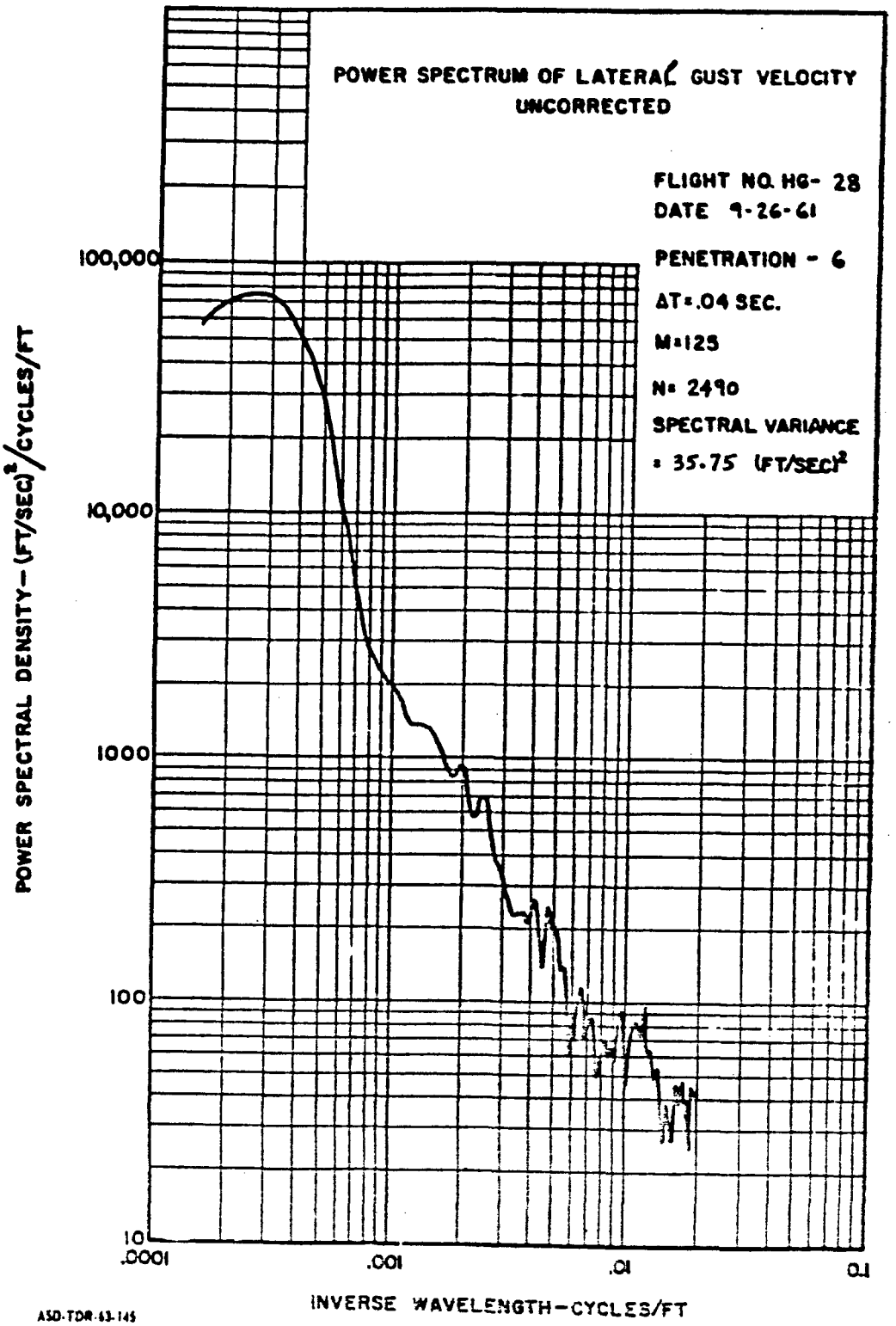

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H8- 28
DATE 9-26-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 3360
SPECTRAL VARIANCE
= 29.68 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

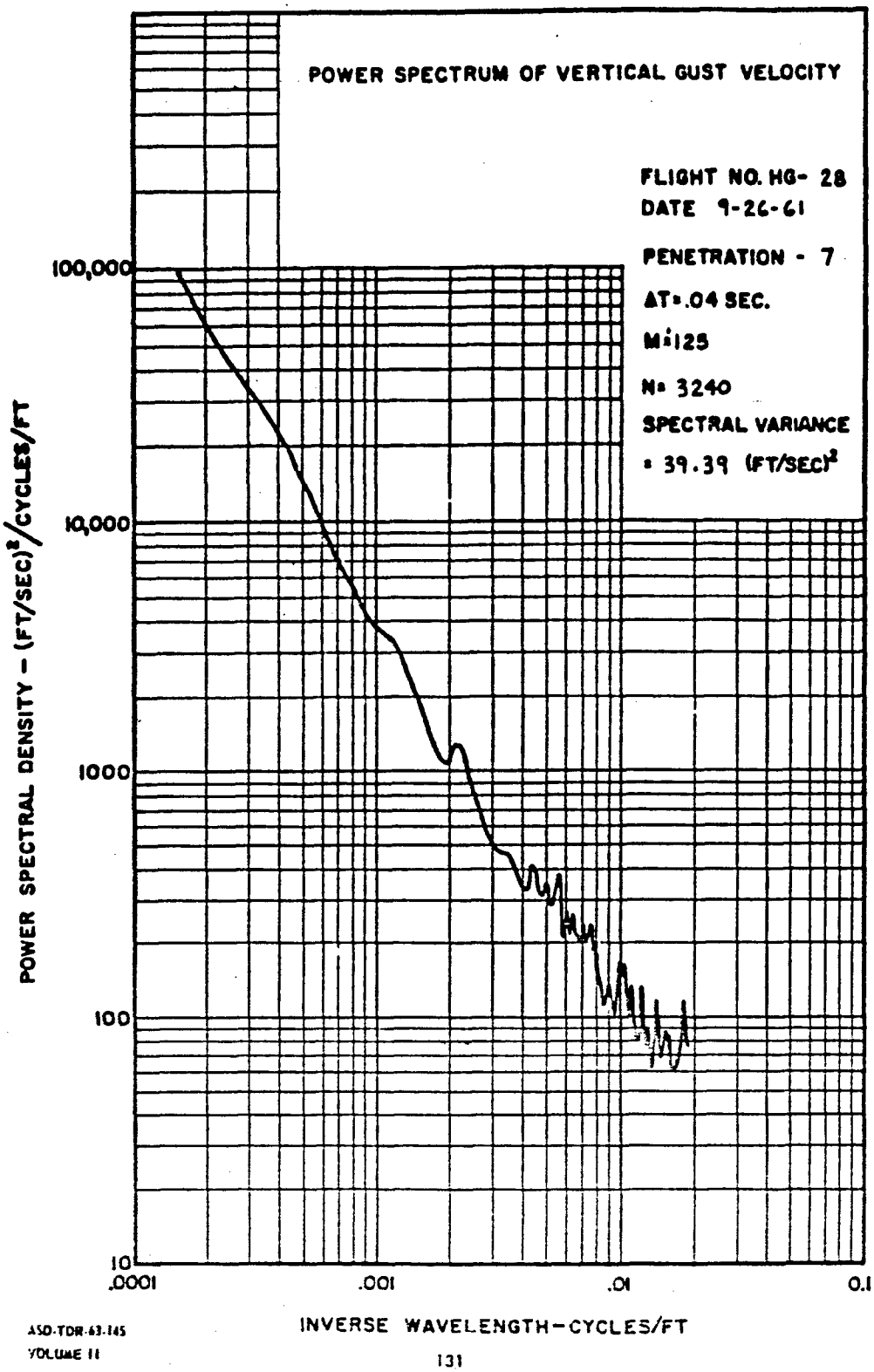

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 3360
SPECTRAL VARIANCE
= 75.79 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

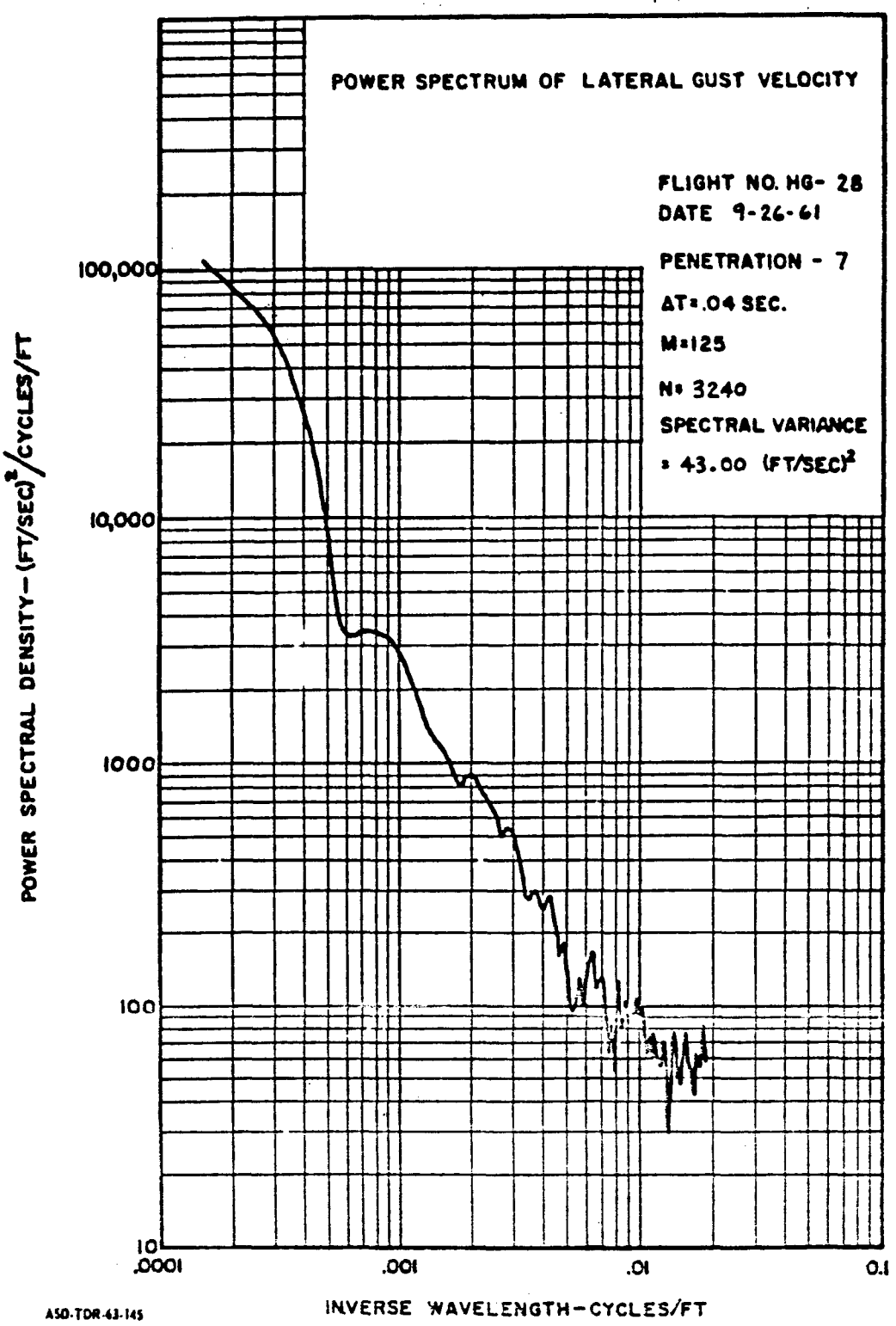

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2490
SPECTRAL VARIANCE
= 53.36 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

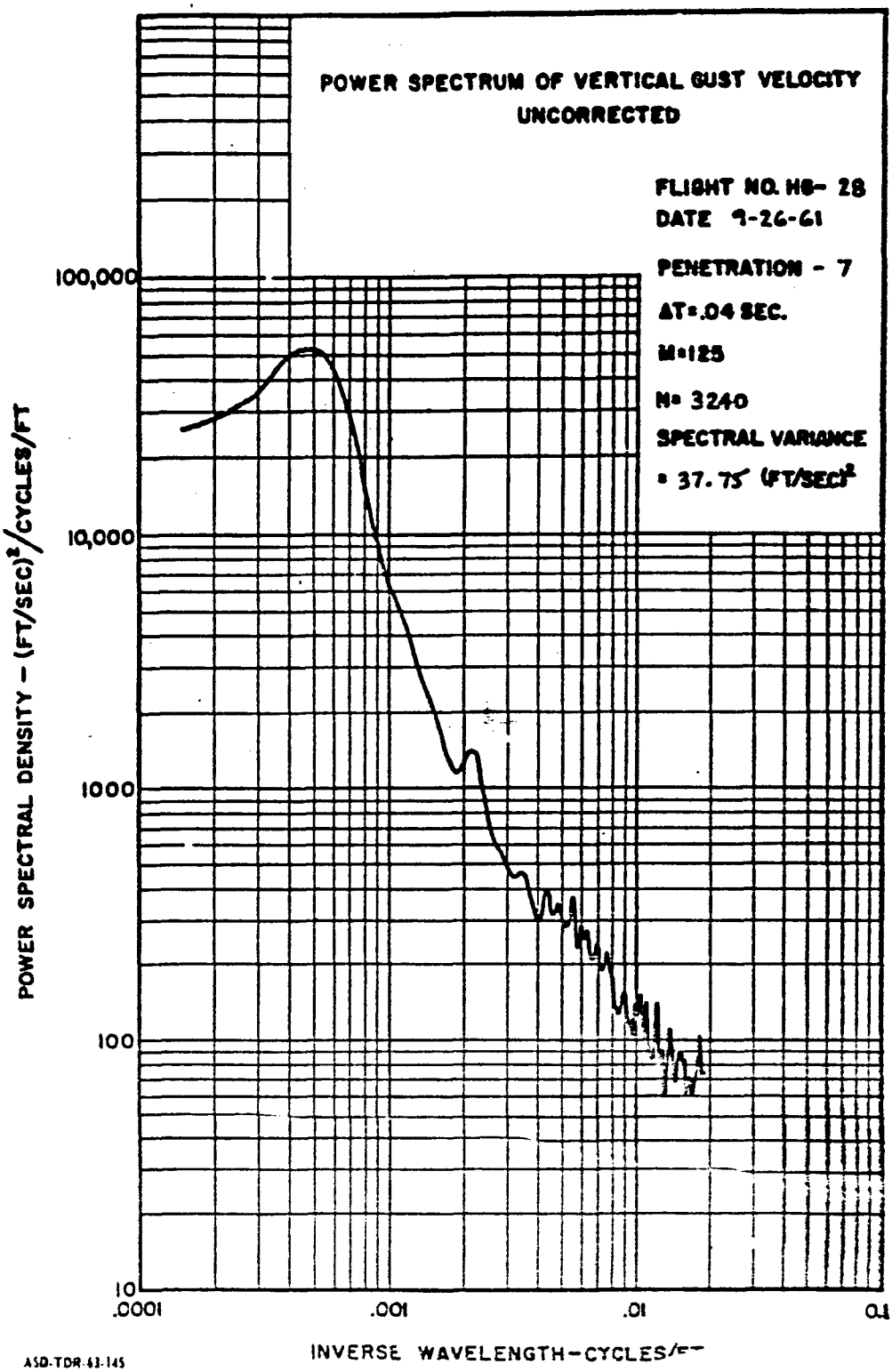

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2490
SPECTRAL VARIANCE
= 66.58 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

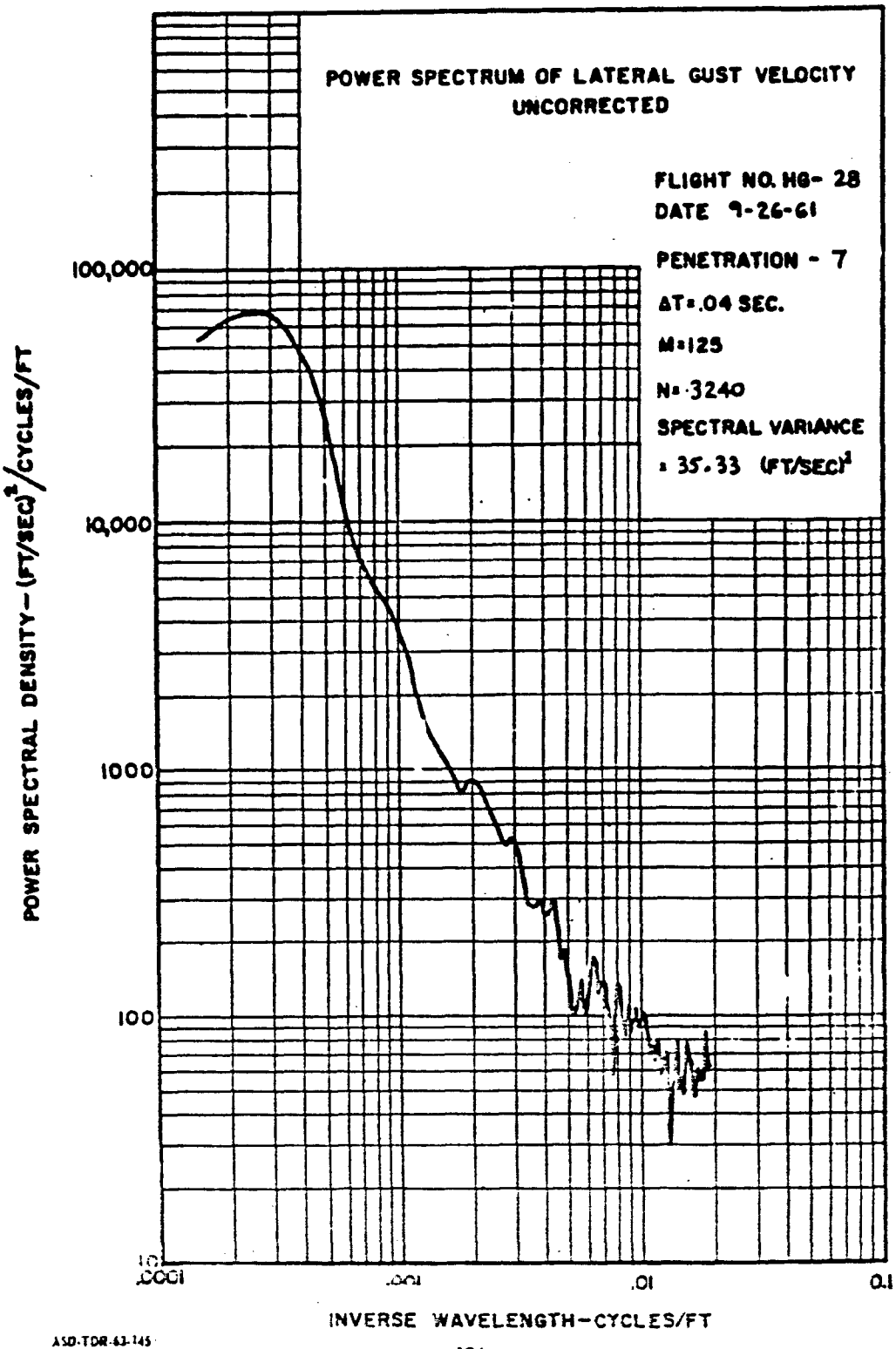

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2490
SPECTRAL VARIANCE
= 42.68 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

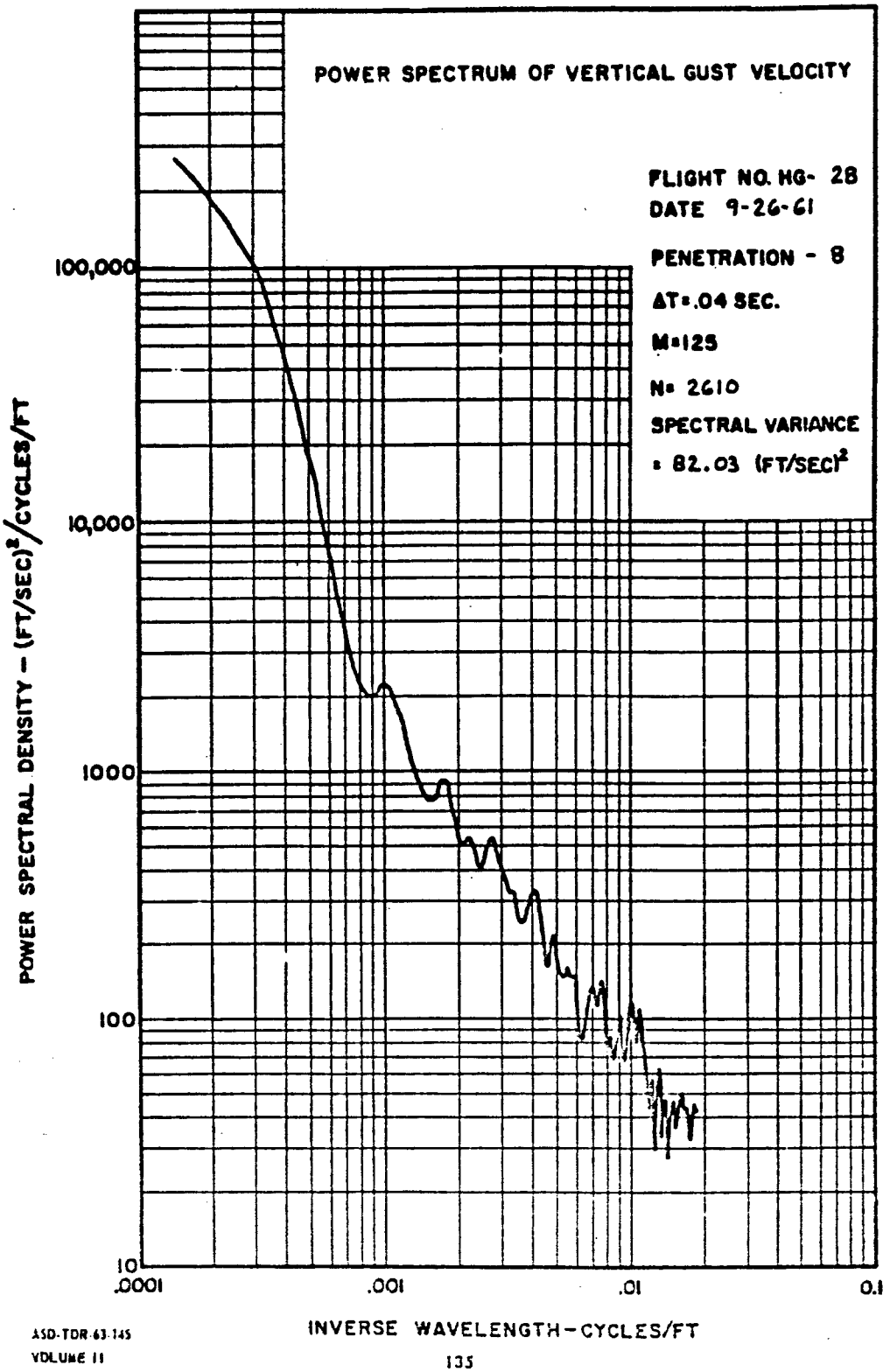

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2490
SPECTRAL VARIANCE
= 35.75 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

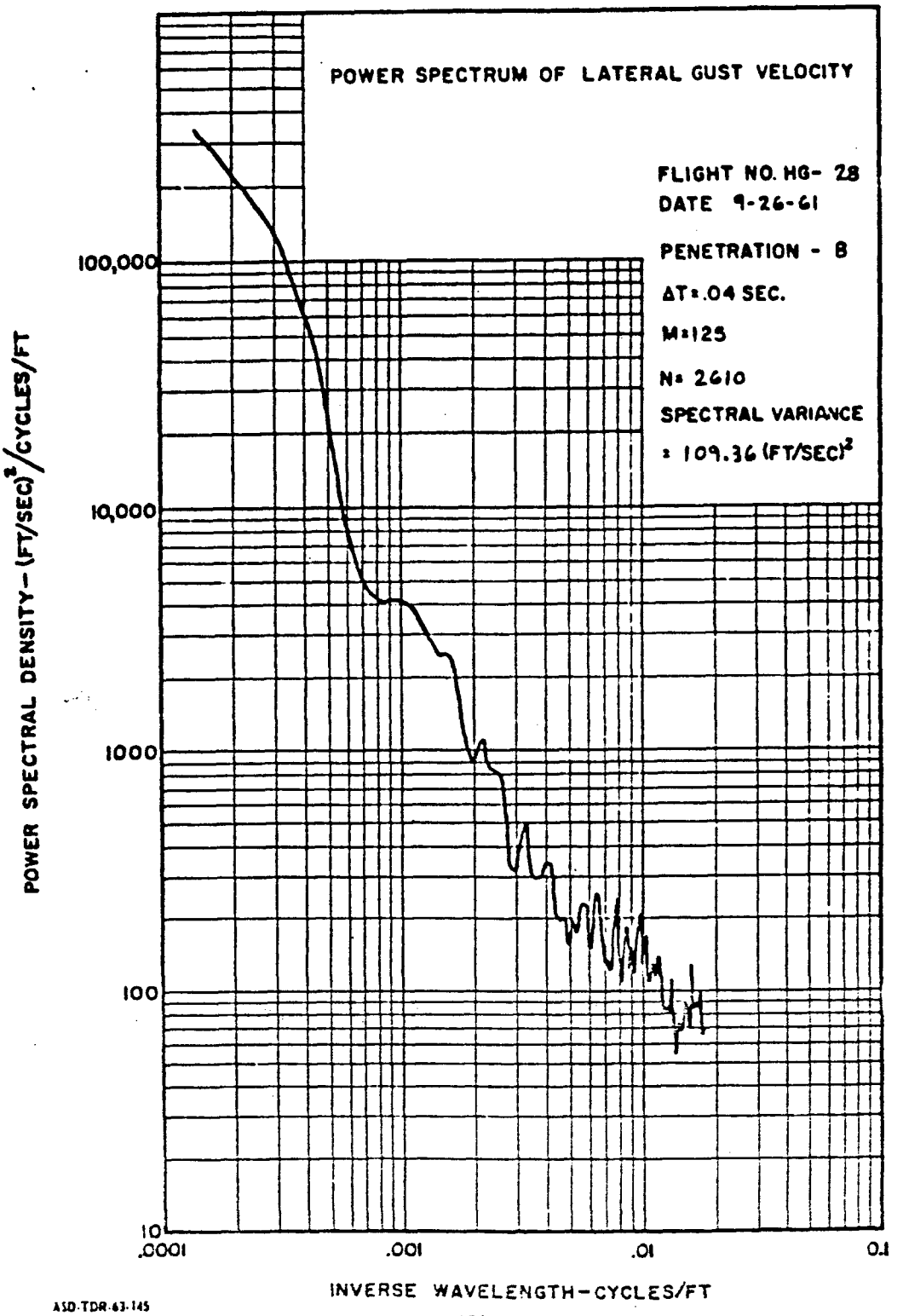

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3240
SPECTRAL VARIANCE
= 39.39 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

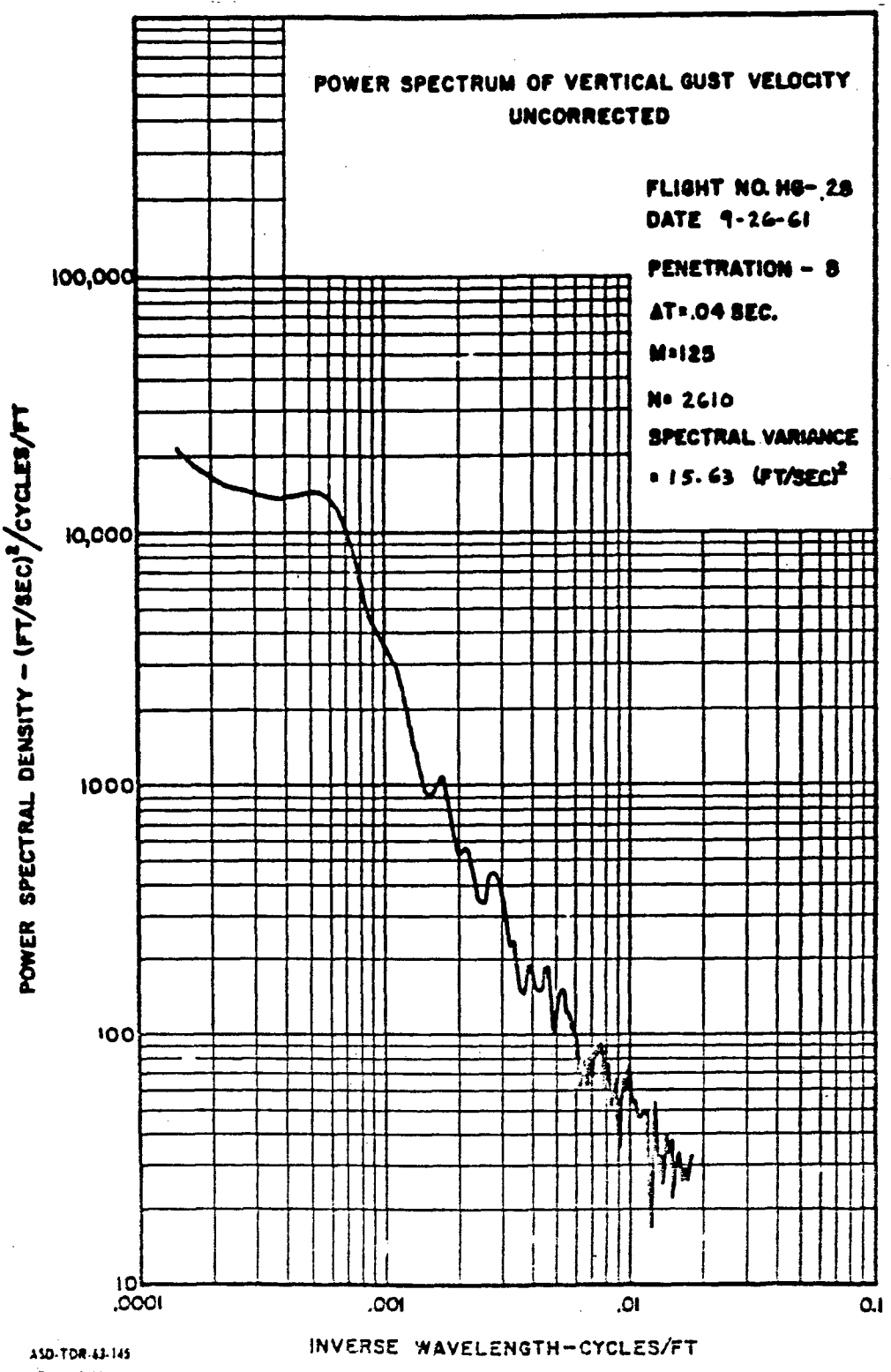

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3240
SPECTRAL VARIANCE
= 43.00 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

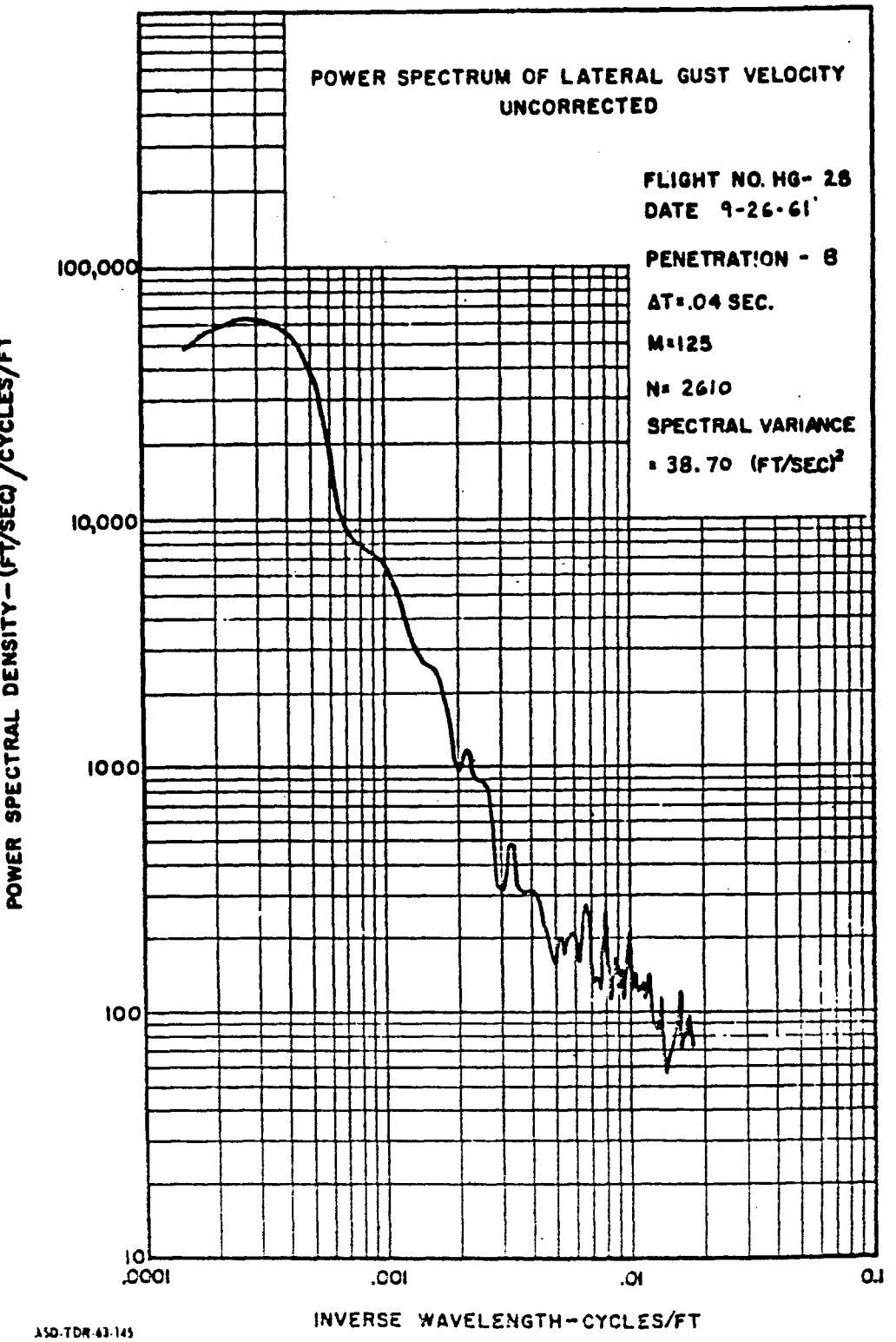

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H8- 28
DATE 9-26-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3240
SPECTRAL VARIANCE
= 37.75 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

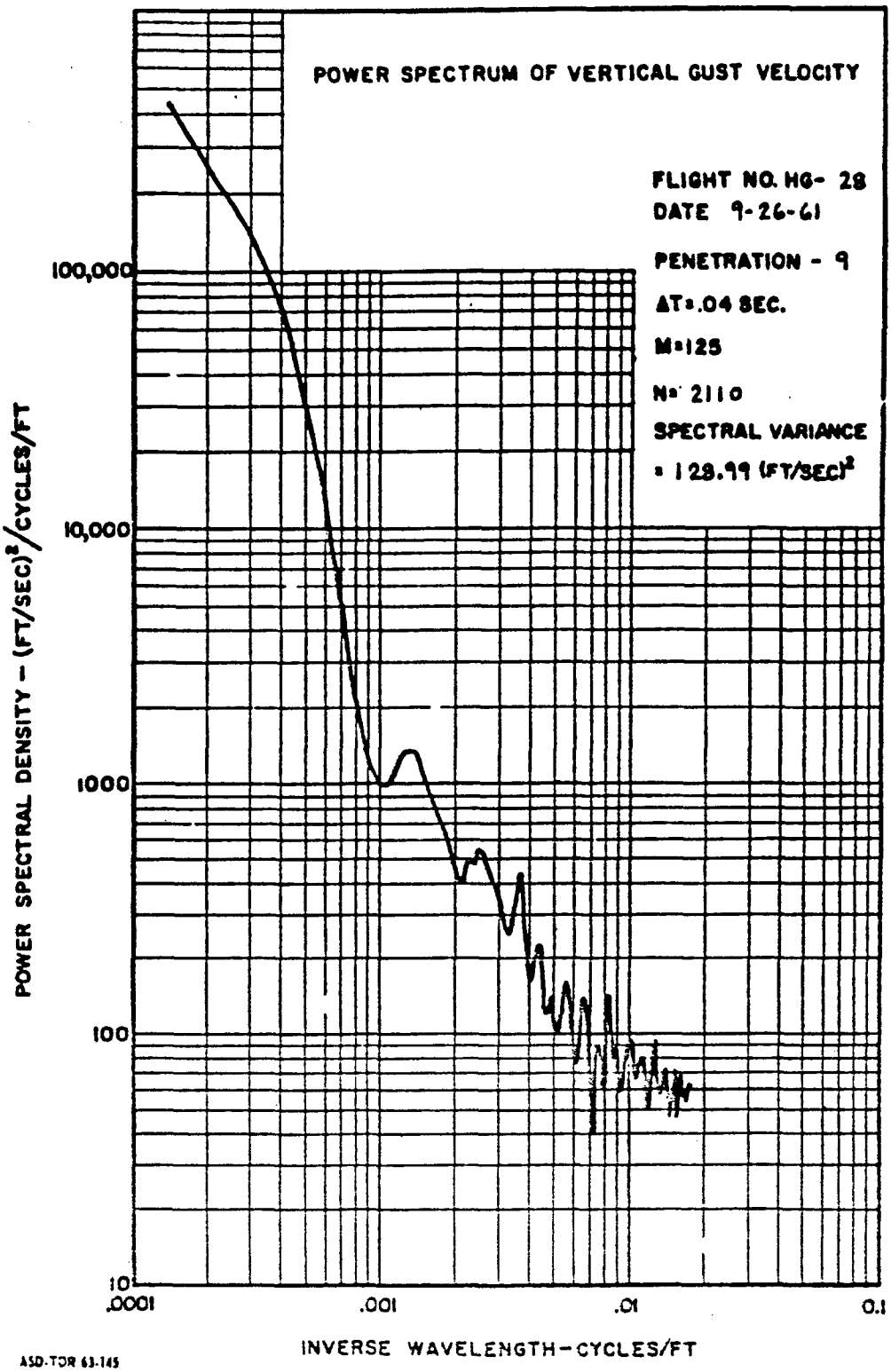

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N=3240
SPECTRAL VARIANCE
= 35.33 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

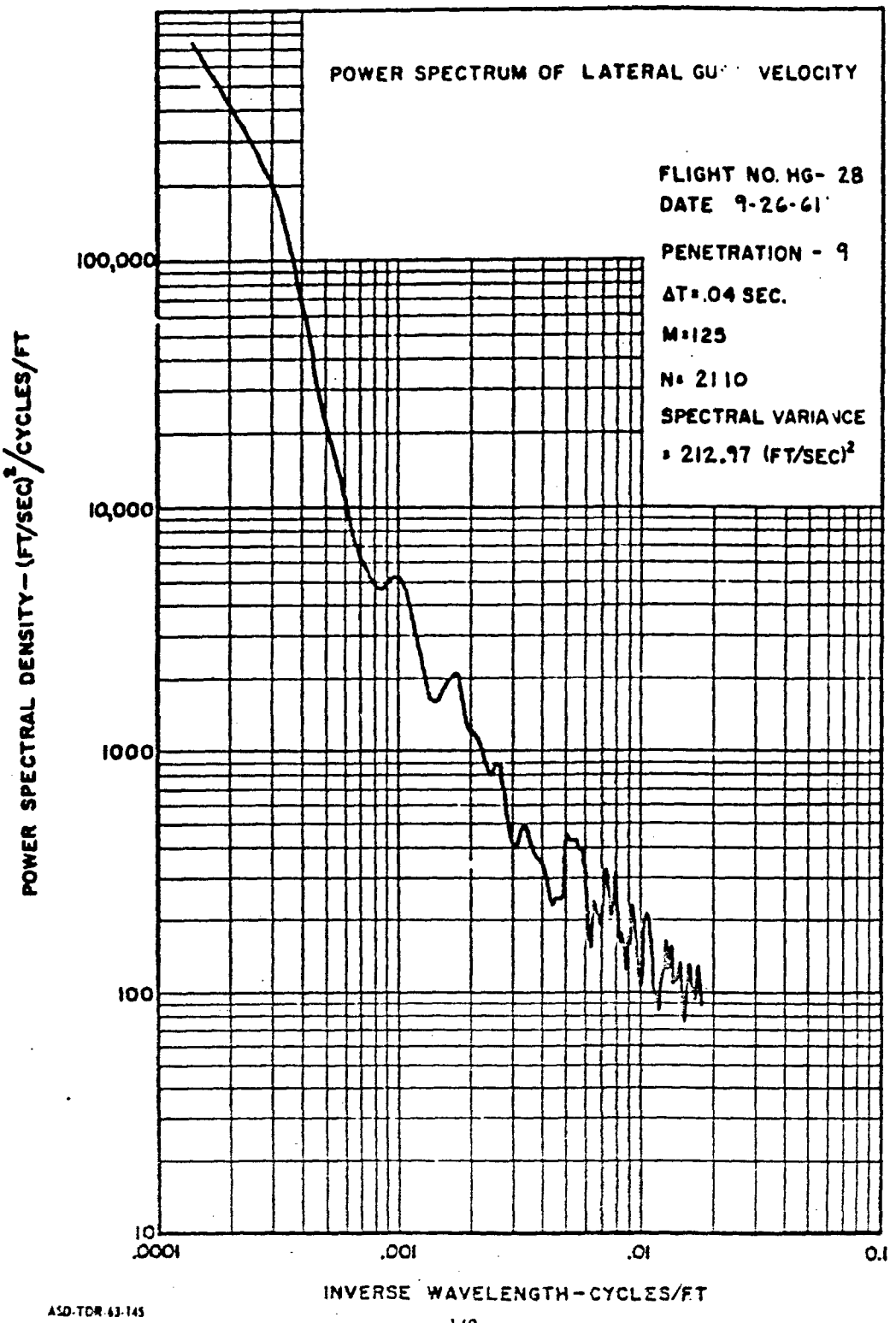

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 2610
SPECTRAL VARIANCE
= 82.03 (FT/SEC)²
100,000
10,000
1000
100
10
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
.0001
.001
.01
0.1
INVERSE WAVELENGTH – CYCLES/FT

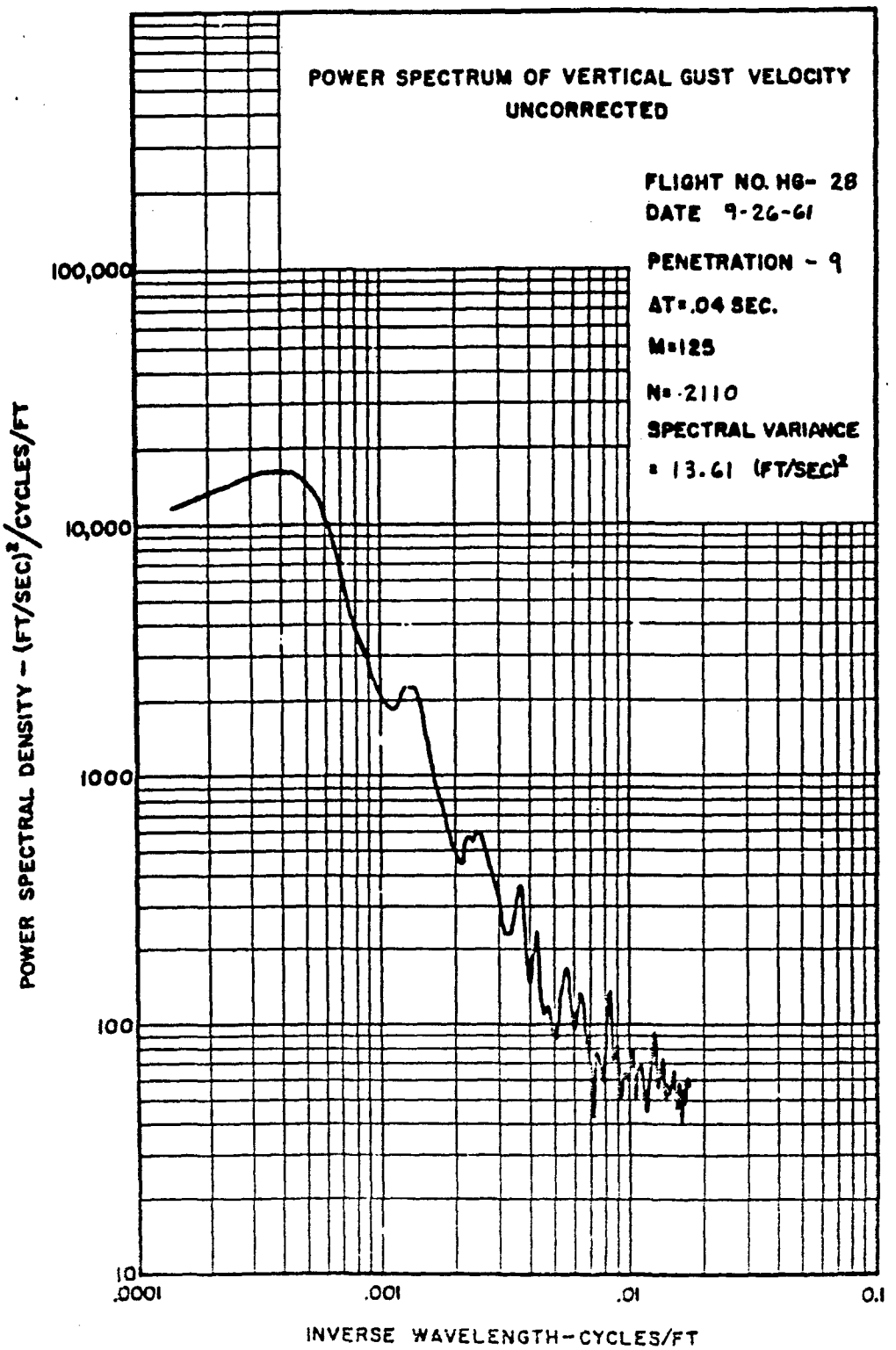

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - B
ΔT=.04 SEC.
M=125
N= 2610
SPECTRAL VARIANCE
= 109.36 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

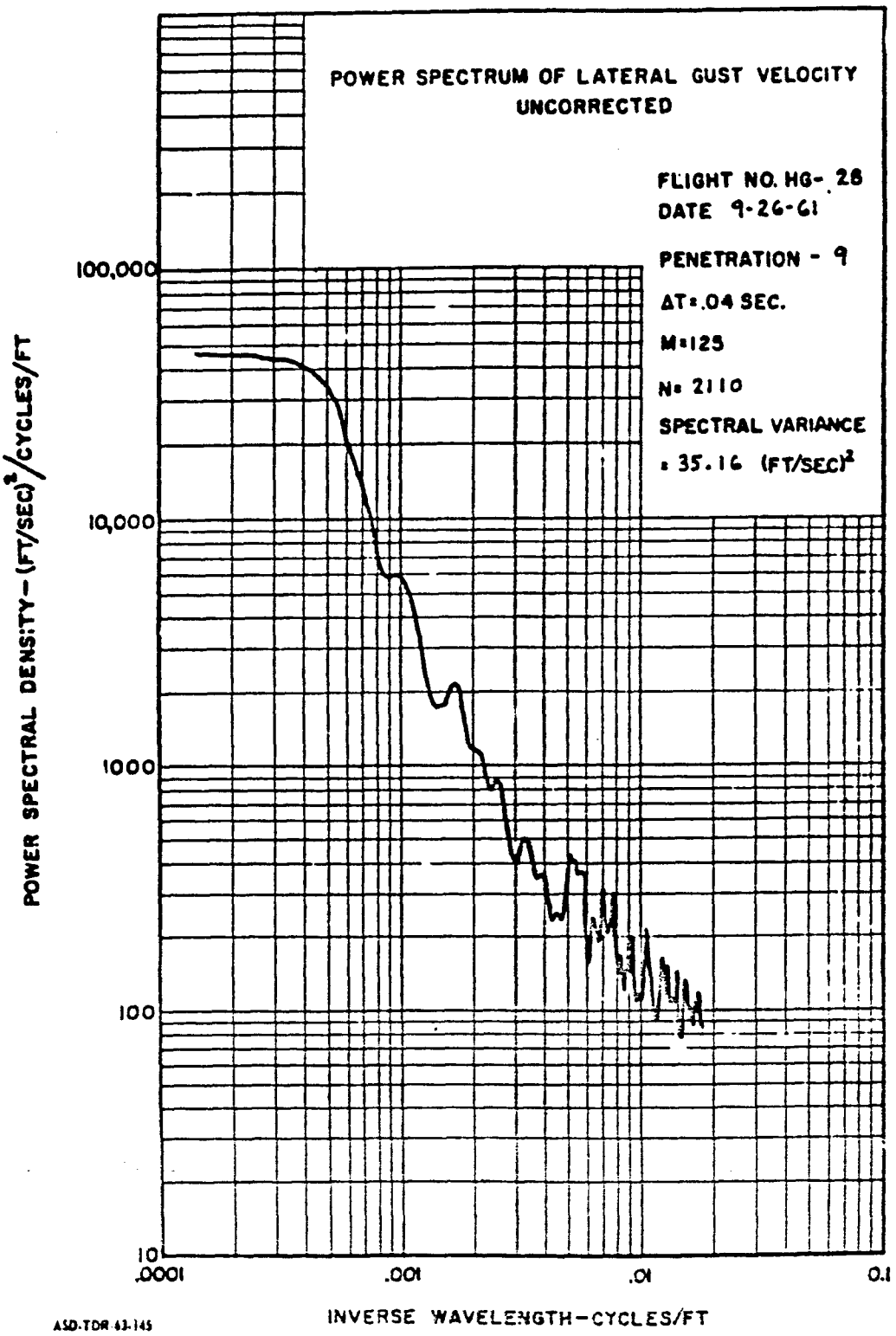

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG-28
DATE 9-26-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 2610
SPECTRAL VARIANCE
= 15.63 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

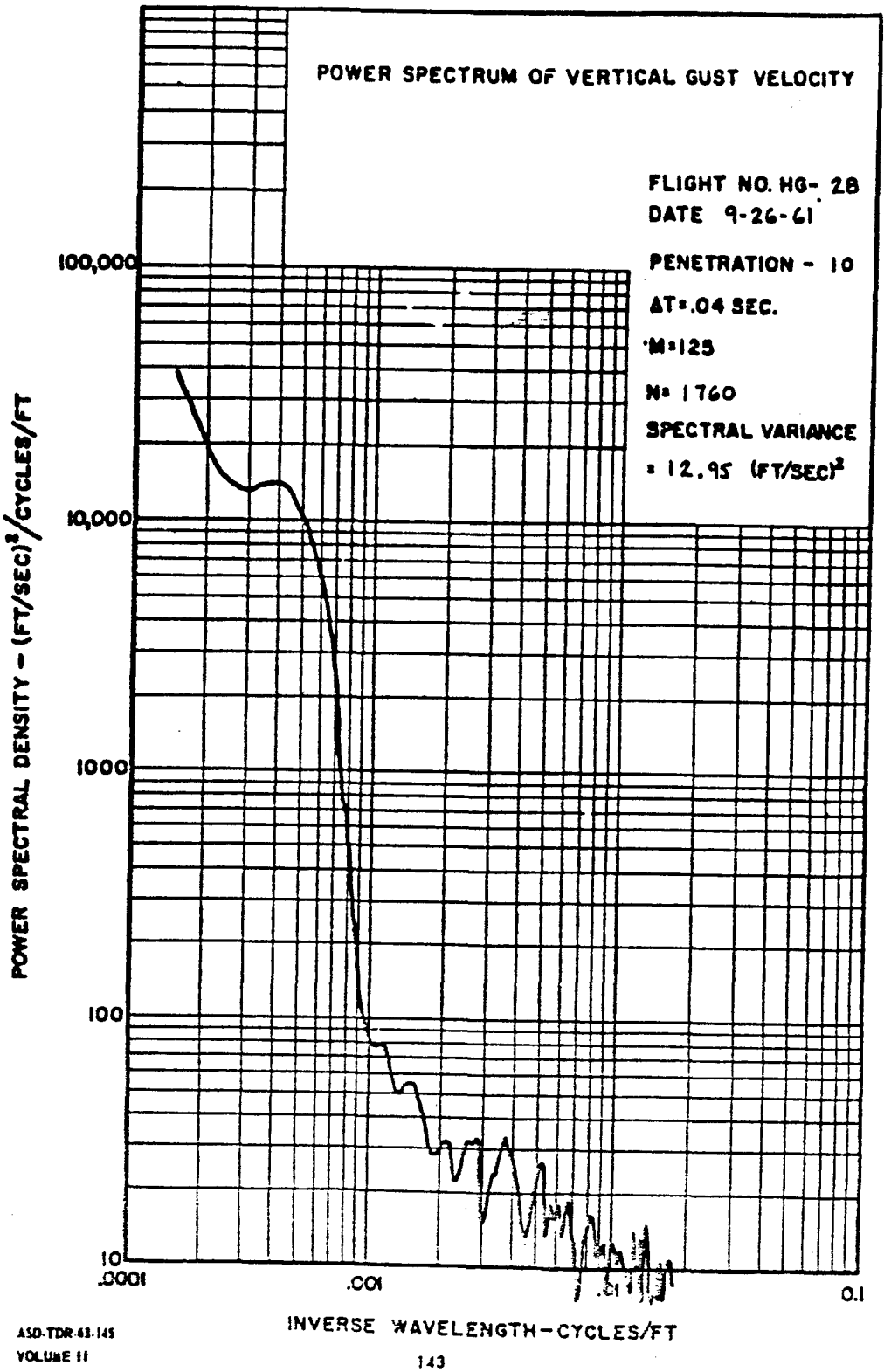

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 2610
SPECTRAL VARIANCE
= 38.70 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

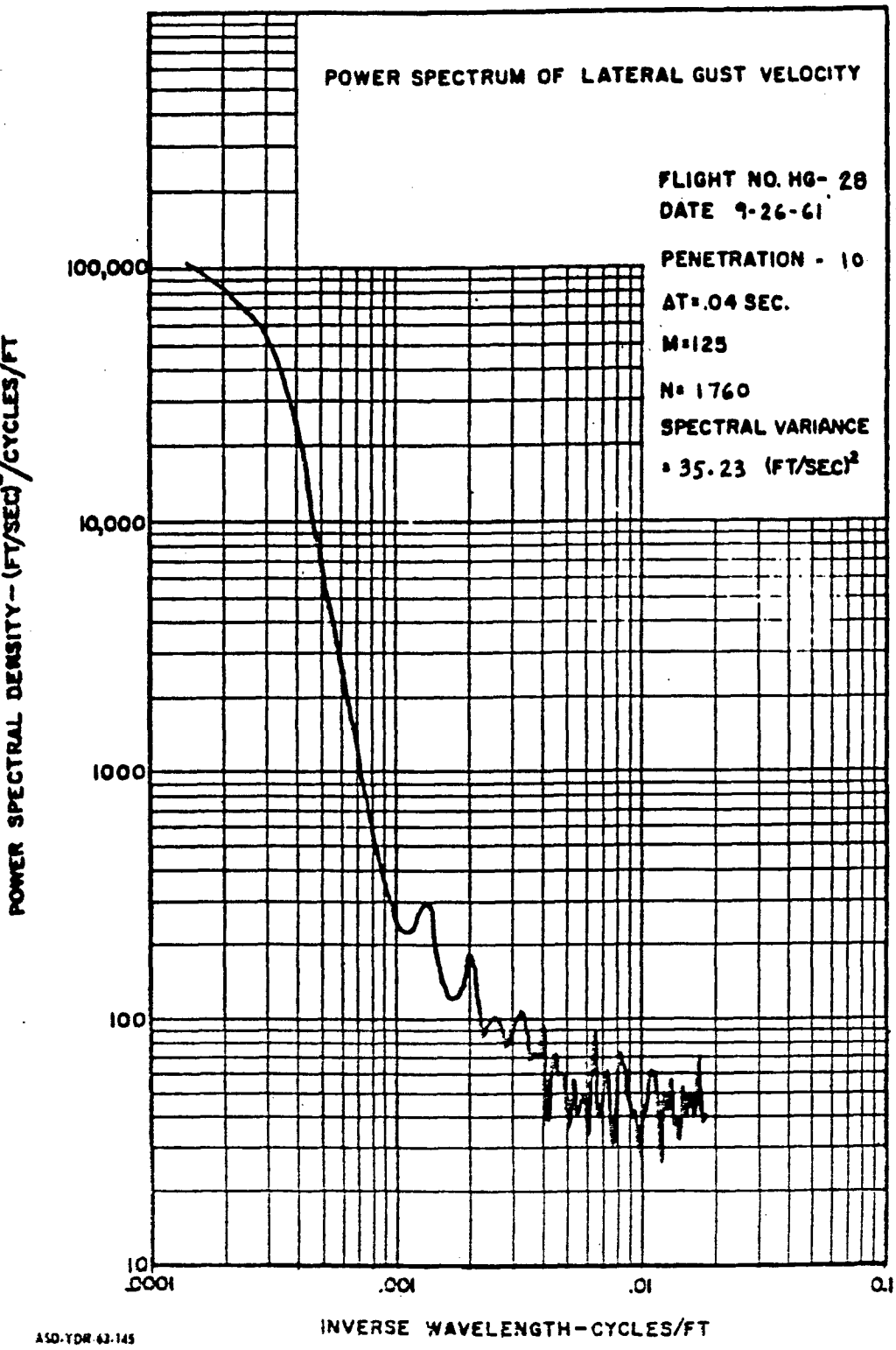

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 2110
SPECTRAL VARIANCE
= 128.99 (FT/SEC)²
100,000
10,000
1000
100
10
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

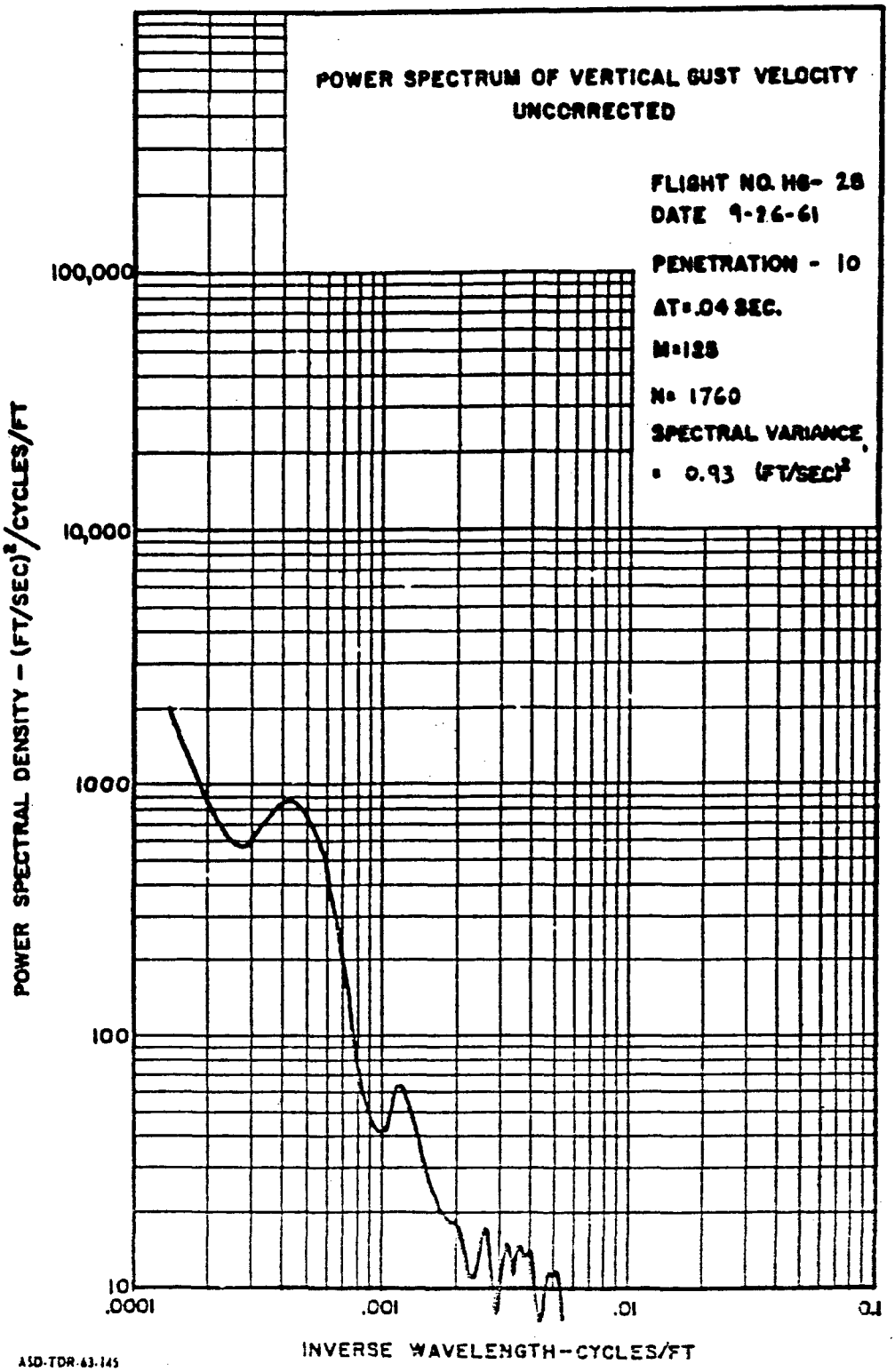

POWER SPECTRUM OF LATERAL GU VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 2110
SPECTRAL VARIANCE
= 212.97 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

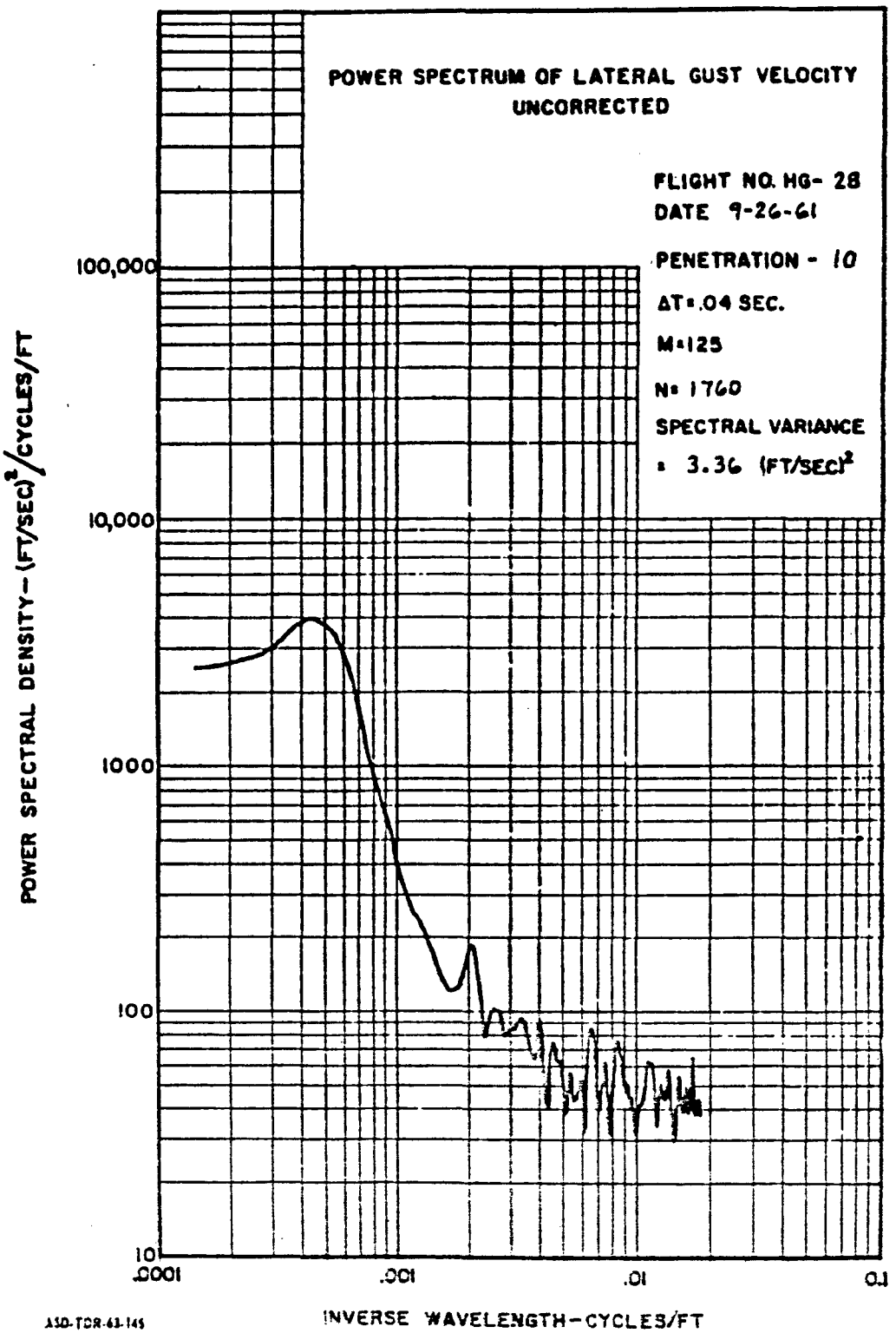

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N=2110
SPECTRAL VARIANCE
= 13.61 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

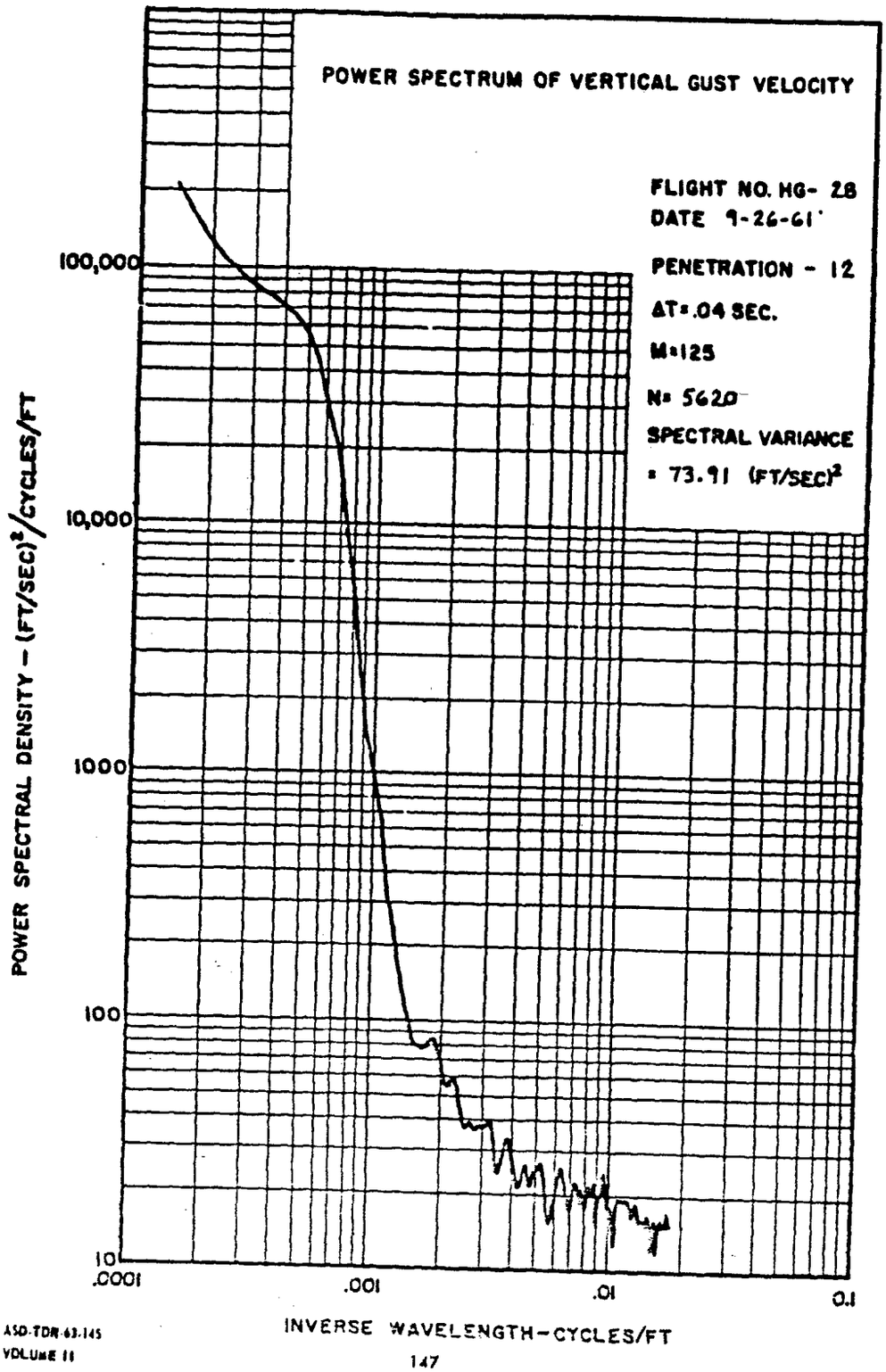

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 2110
SPECTRAL VARIANCE
= 35.16 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

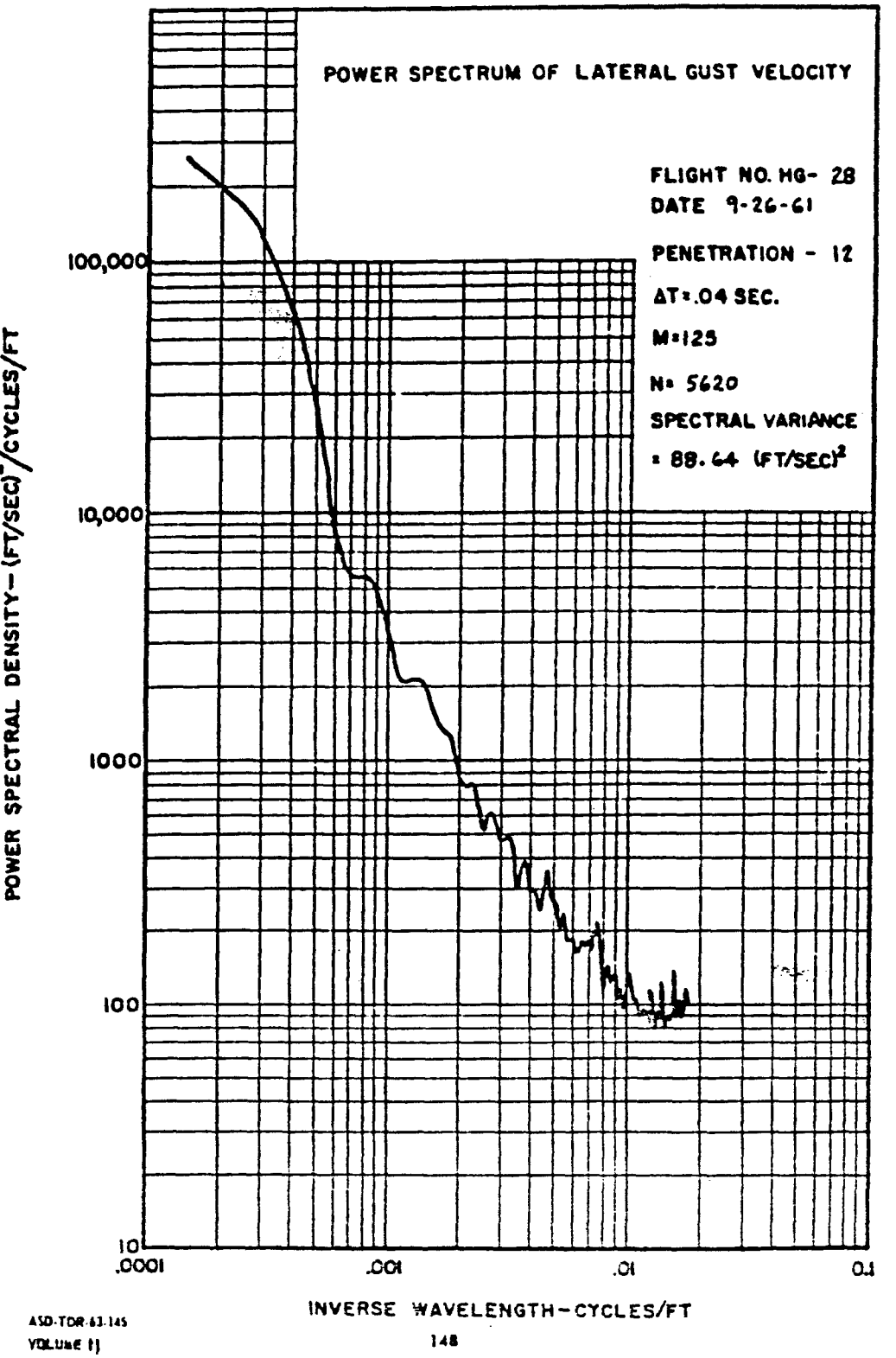

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1760
SPECTRAL VARIANCE
= 12.95 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

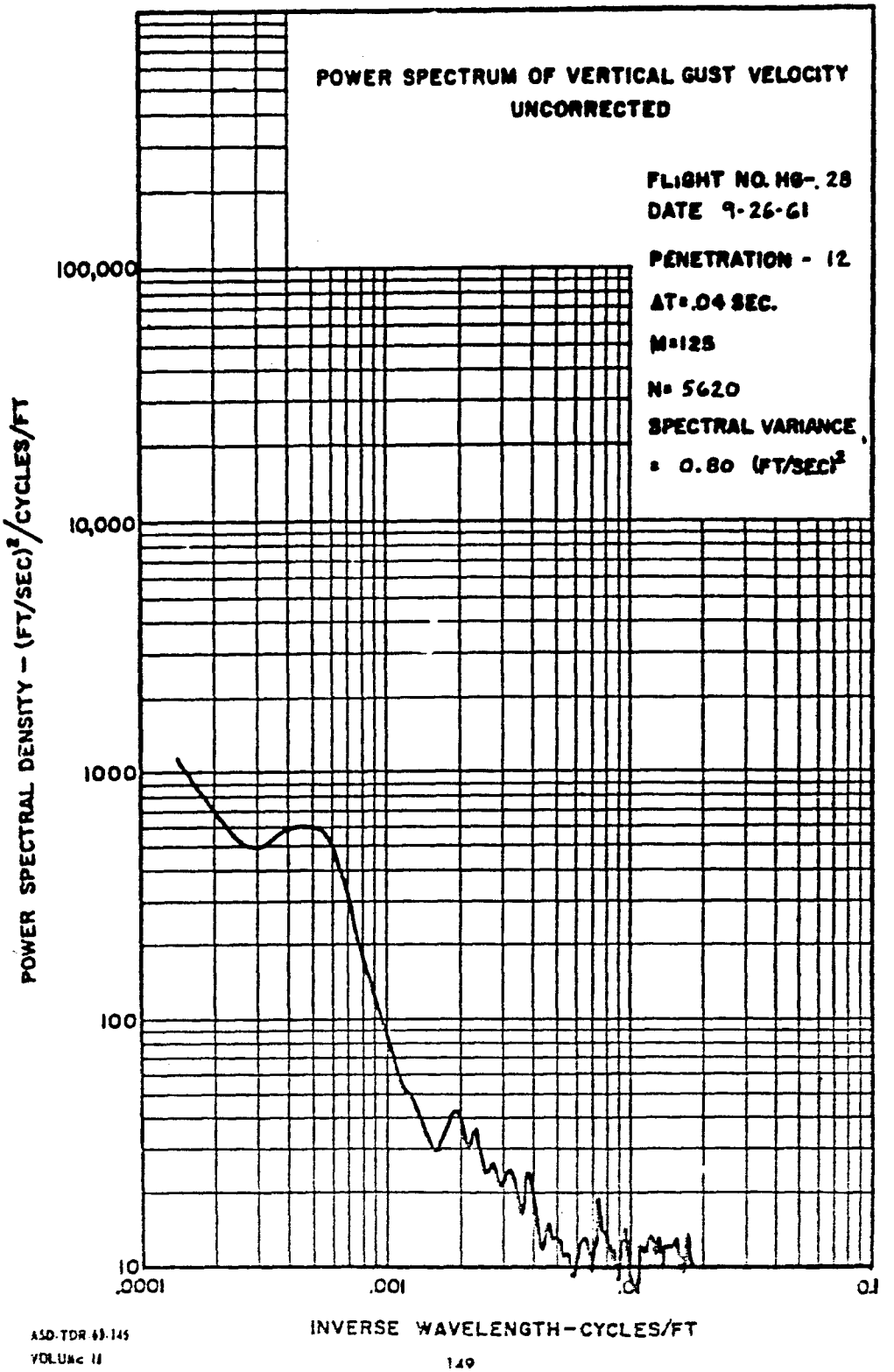

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1760
SPECTRAL VARIANCE
= 35.23 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

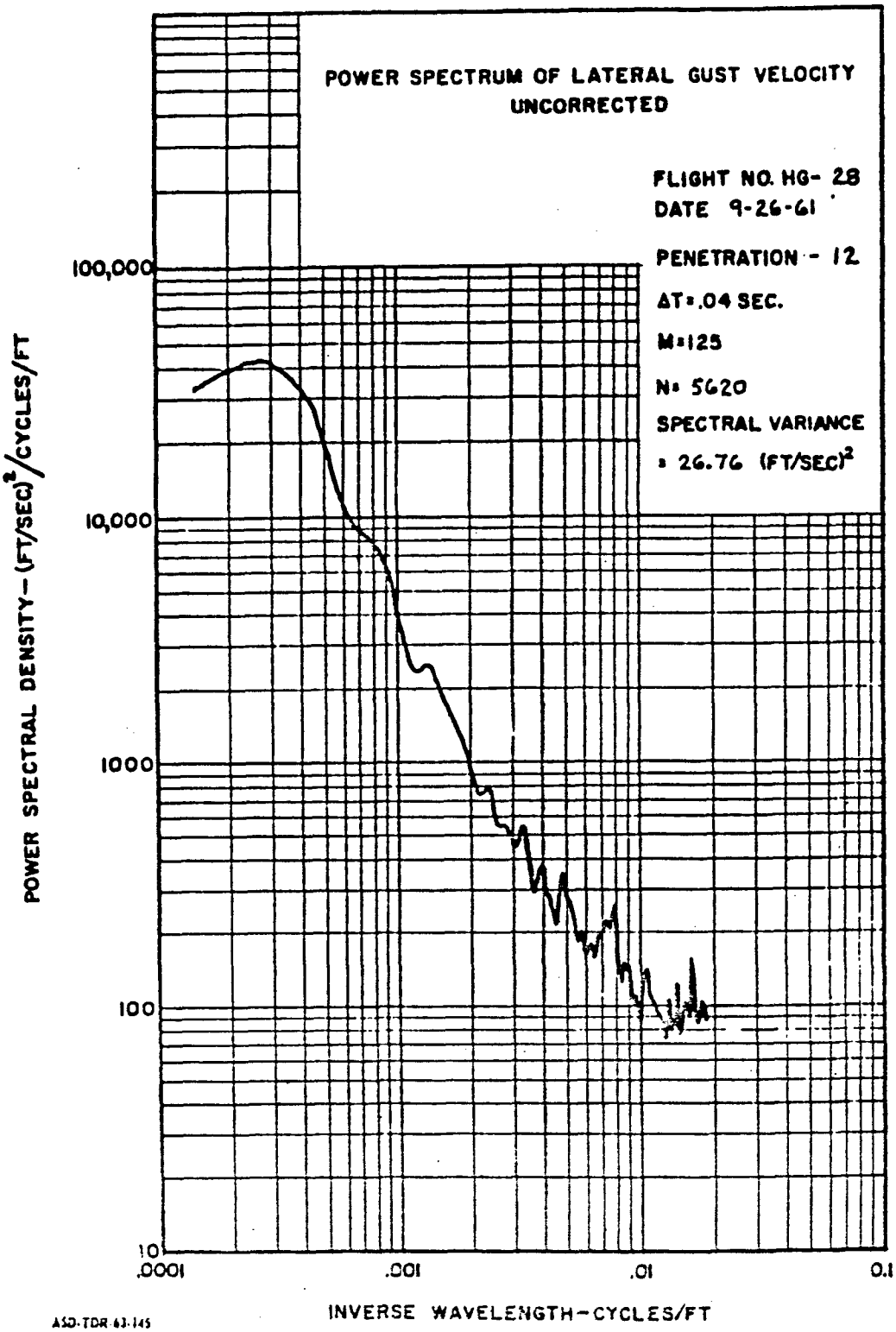

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H8- 28
DATE 9-26-61
PENETRATION - 10
ΔT=.04 SEC.
M=128
N= 1760
SPECTRAL VARIANCE
= 0.93 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

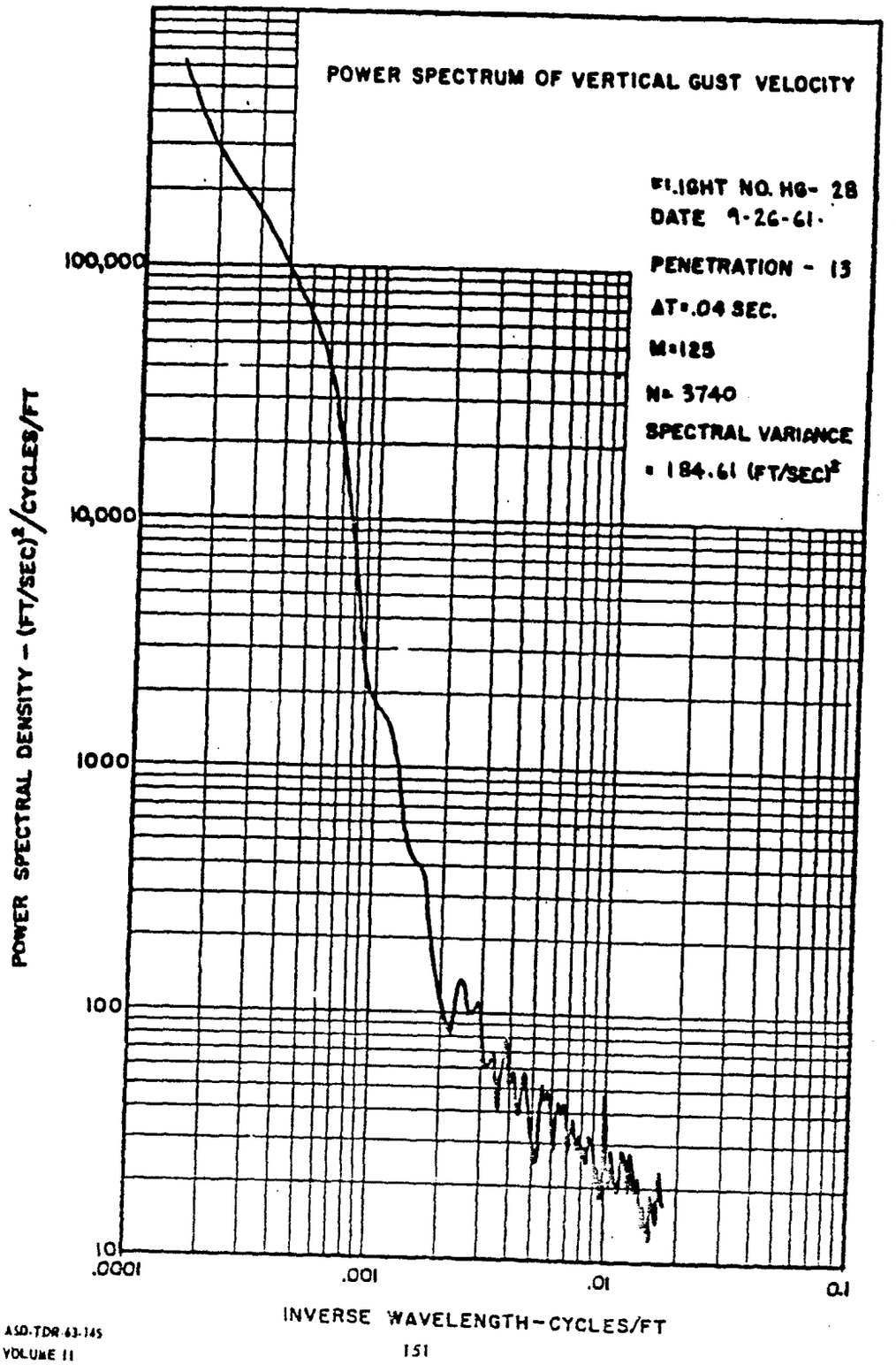

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1760
SPECTRAL VARIANCE
= 3.36 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

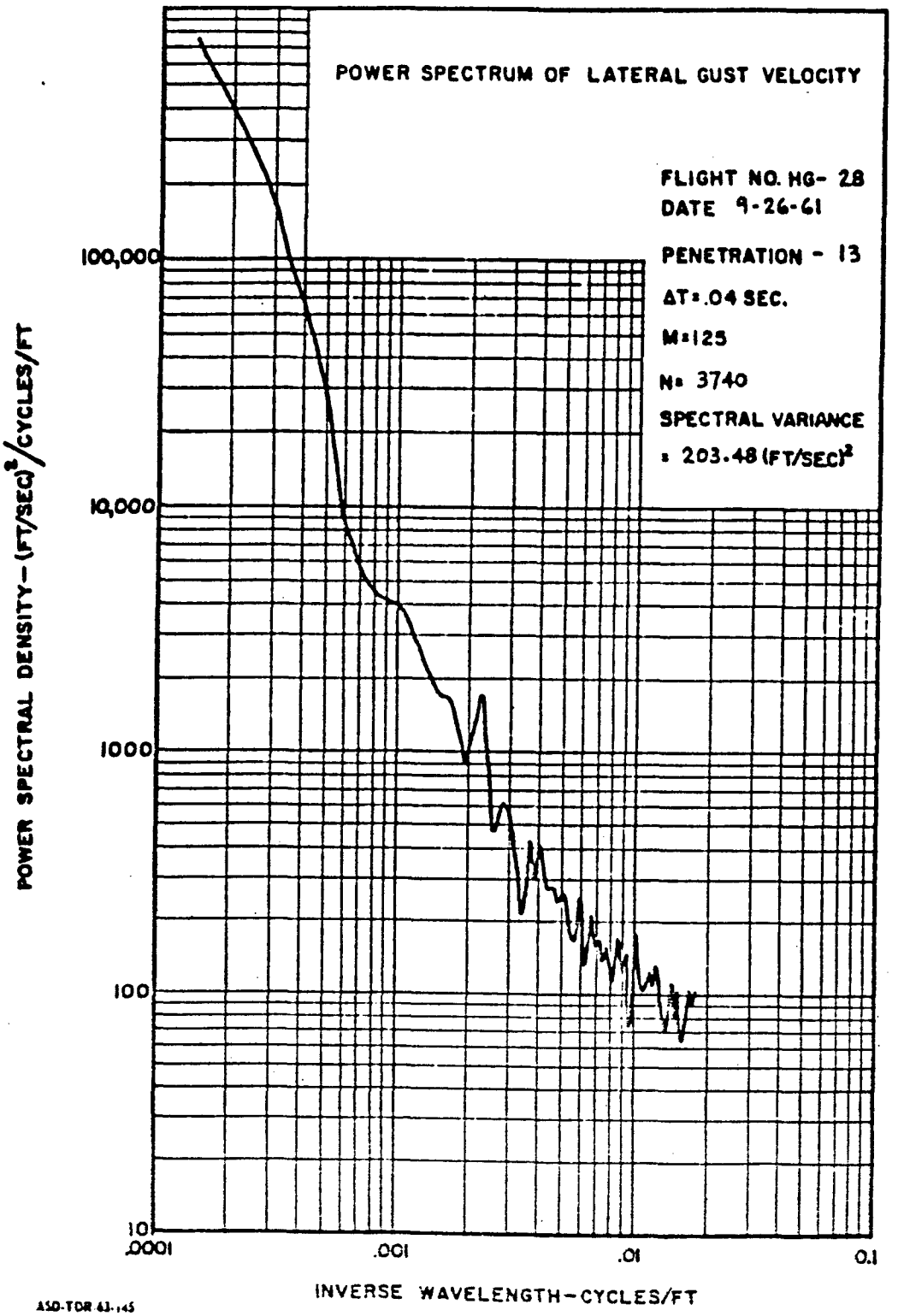

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 5620
SPECTRAL VARIANCE
= 73.91 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

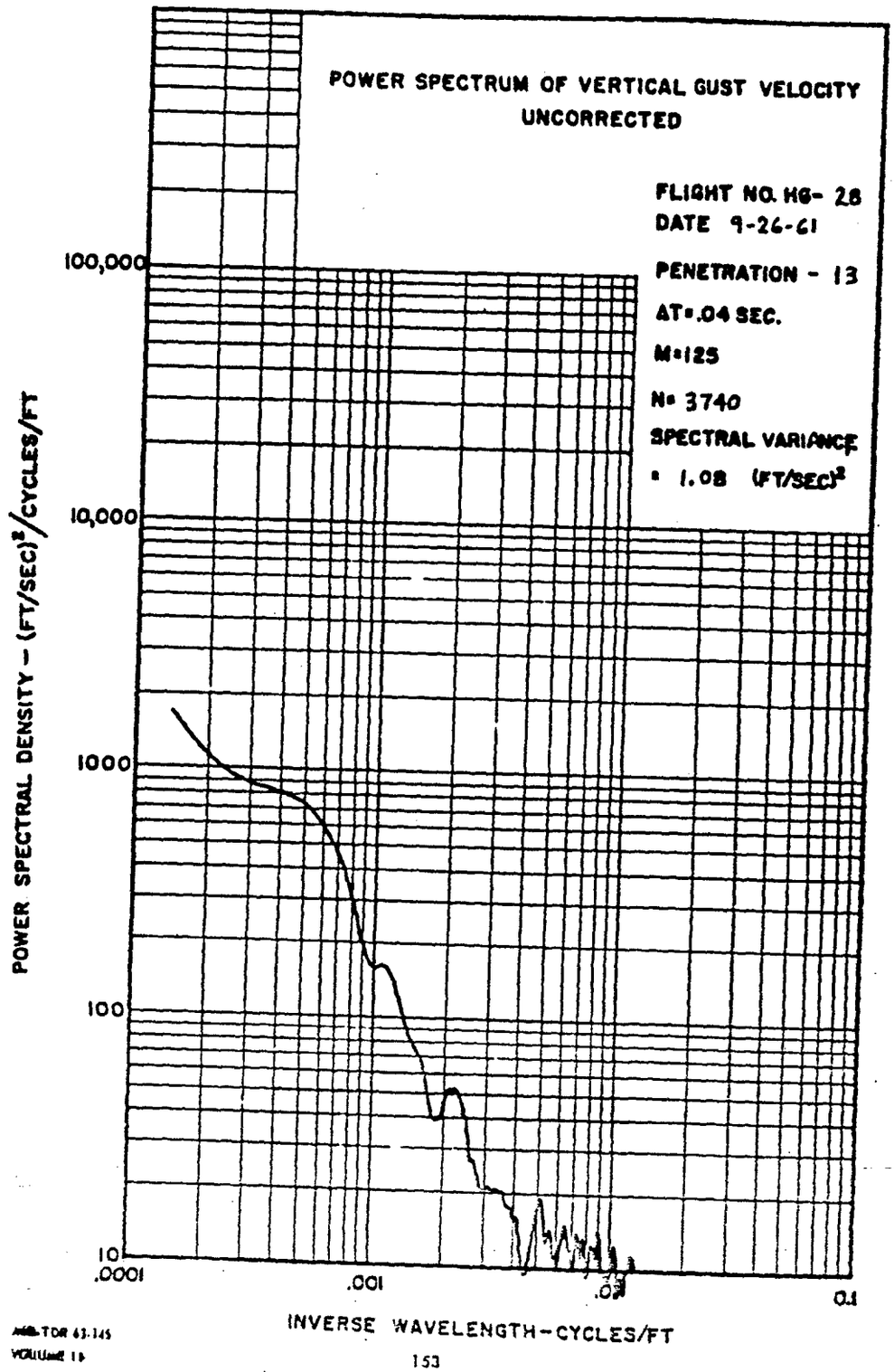

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 5620
SPECTRAL VARIANCE
= 88.64 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

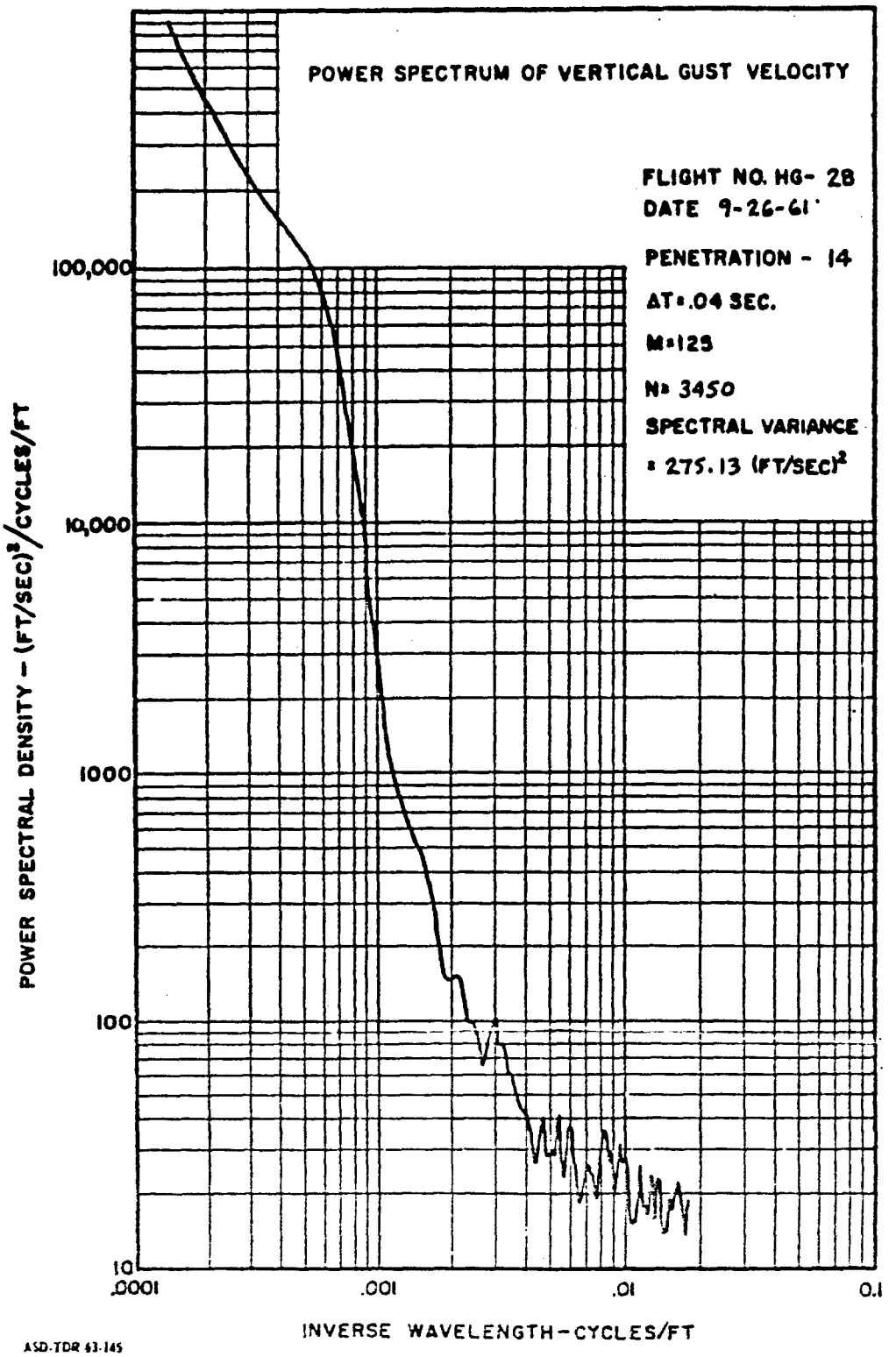

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H8-. 28
DATE 9-26-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 5620
SPECTRAL VARIANCE
= 0.80 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

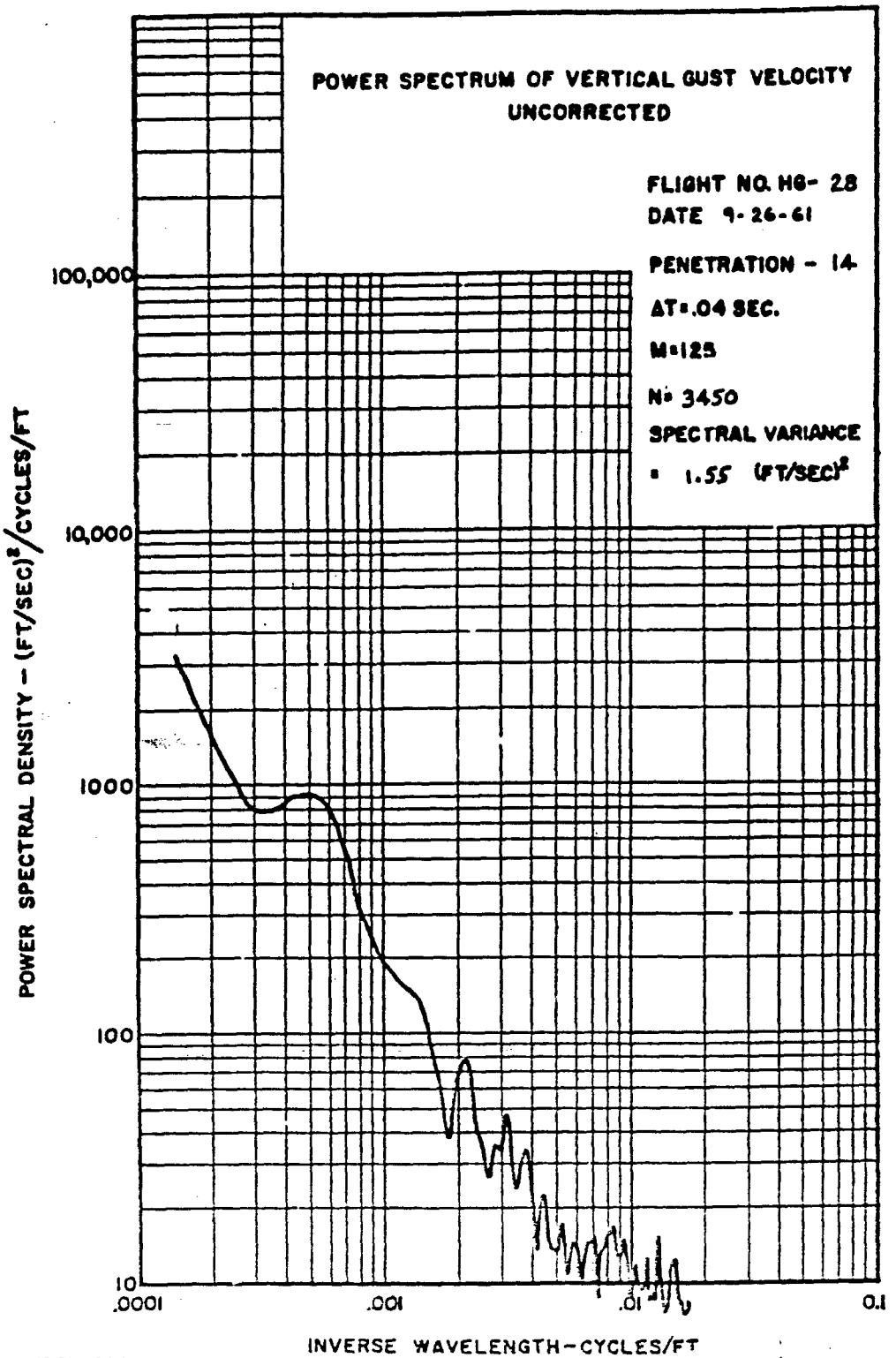

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 5620
SPECTRAL VARIANCE
= 26.76 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

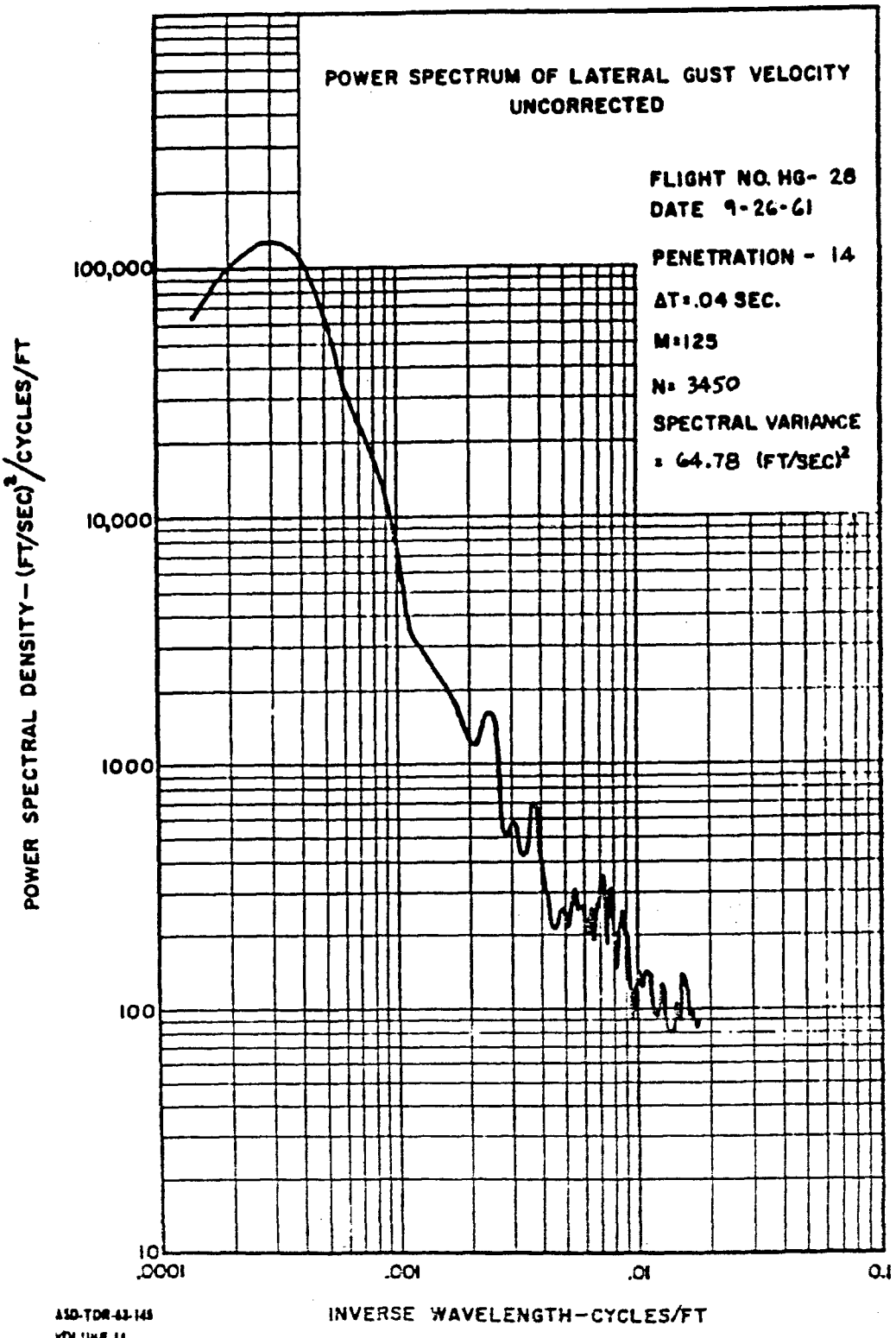

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61.
PENETRATION - 13
ΔT=.04 SEC.
M=1.25
N= 3740
SPECTRAL VARIANCE
= 184.61 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

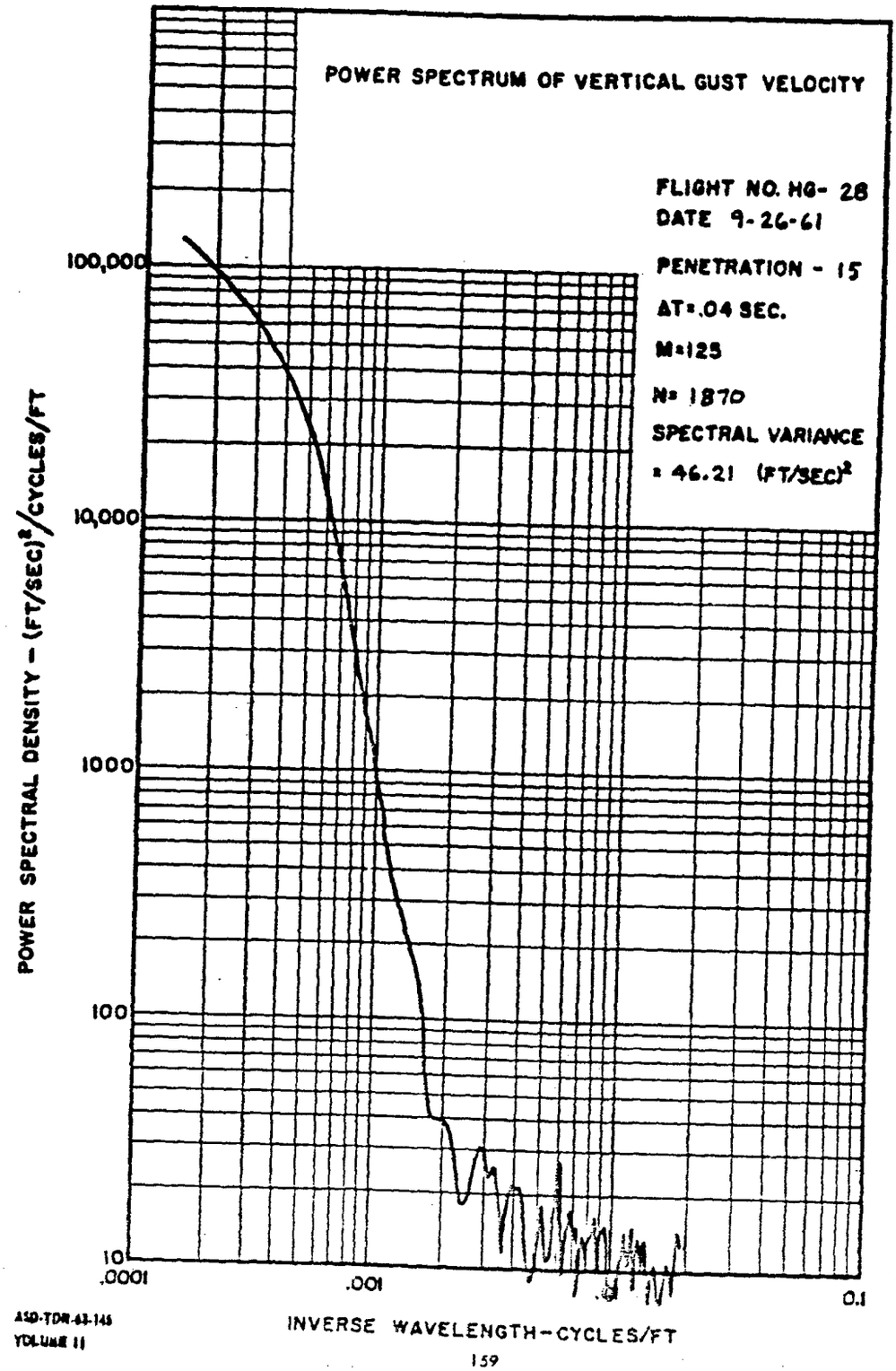

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 3740
SPECTRAL VARIANCE
= 203.48 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

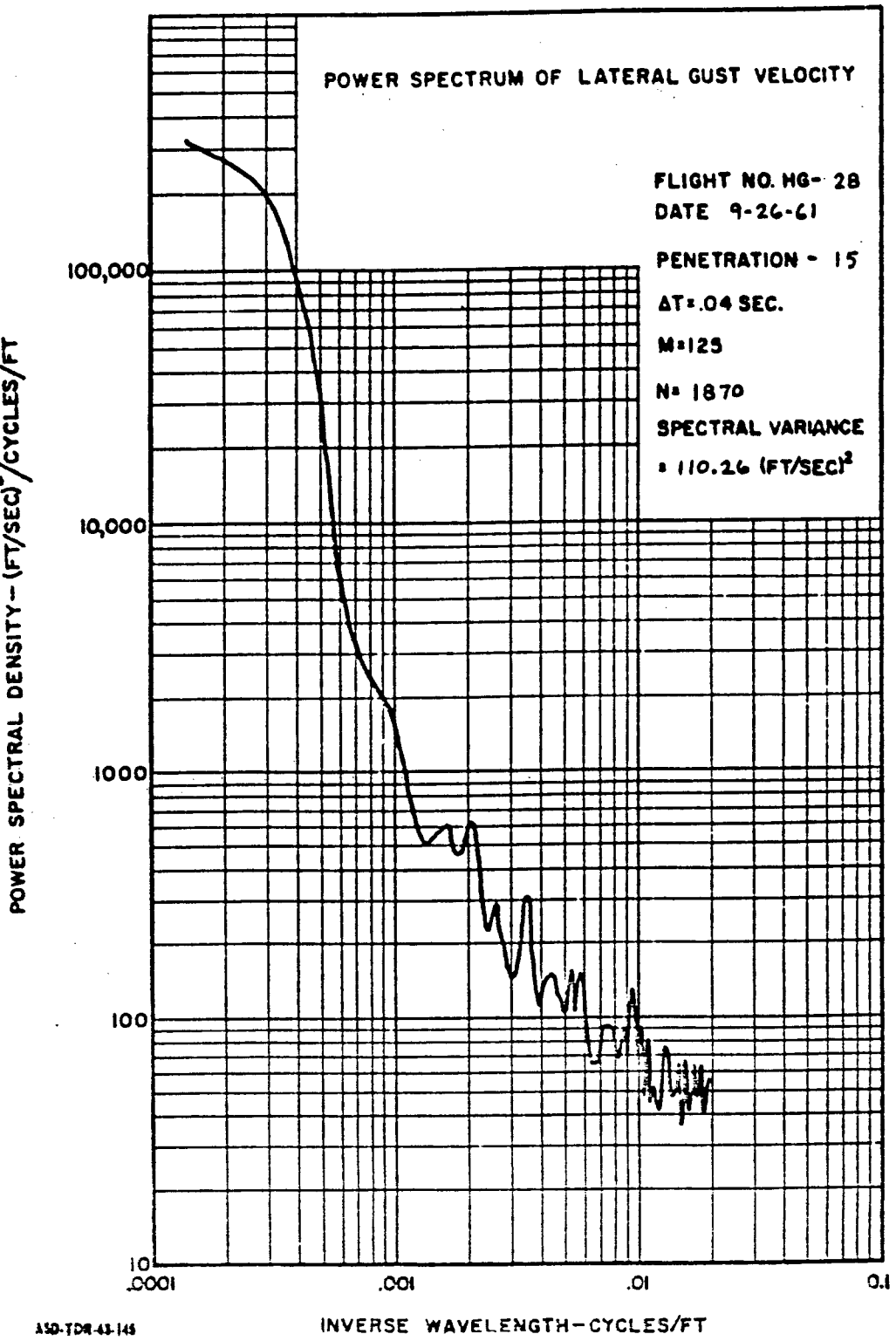

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 13
AT=.04 SEC.
M=125
N= 3740
SPECTRAL VARIANCE
= 1.08 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

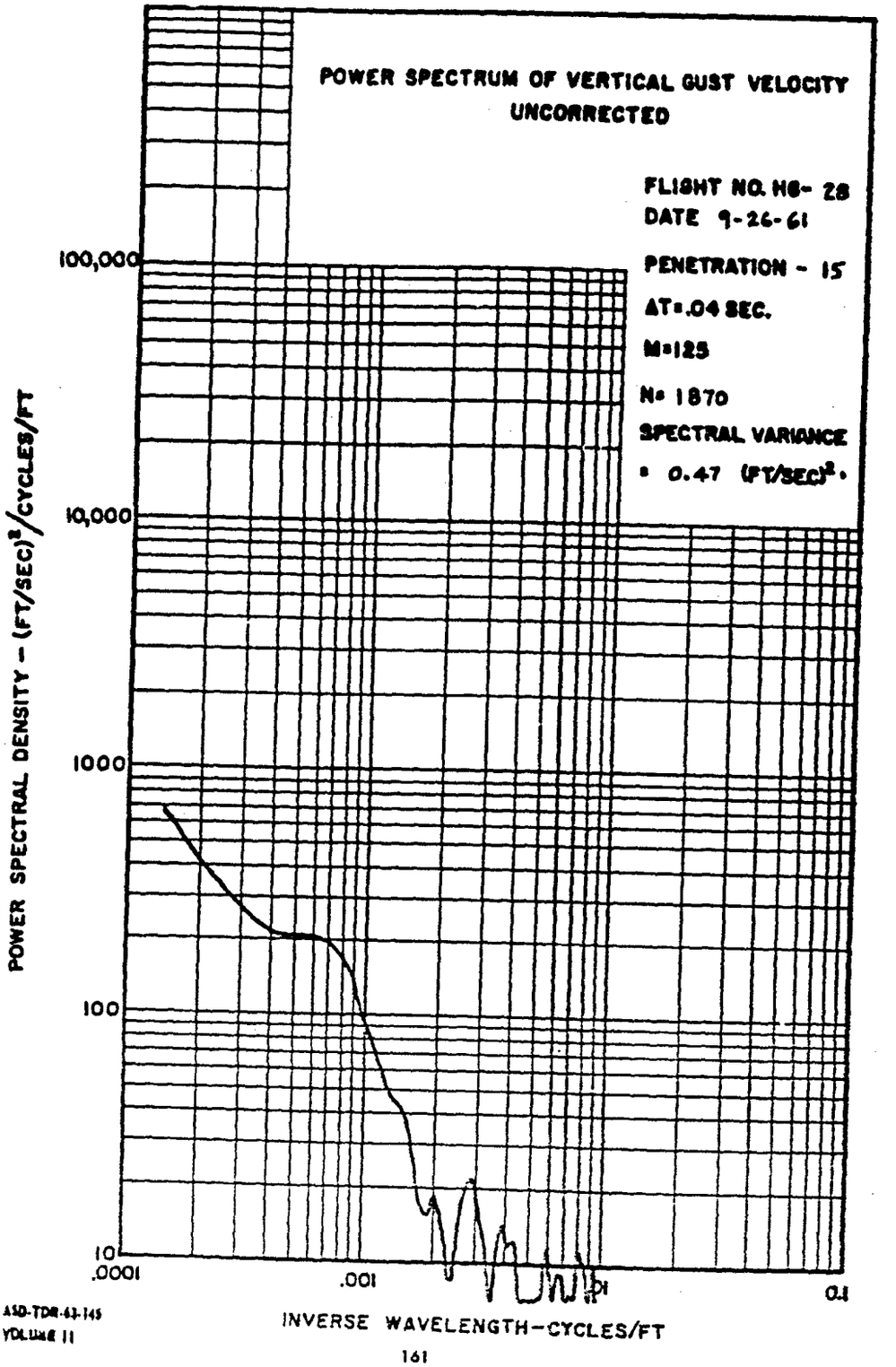

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 3450
SPECTRAL VARIANCE
= 275.13 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

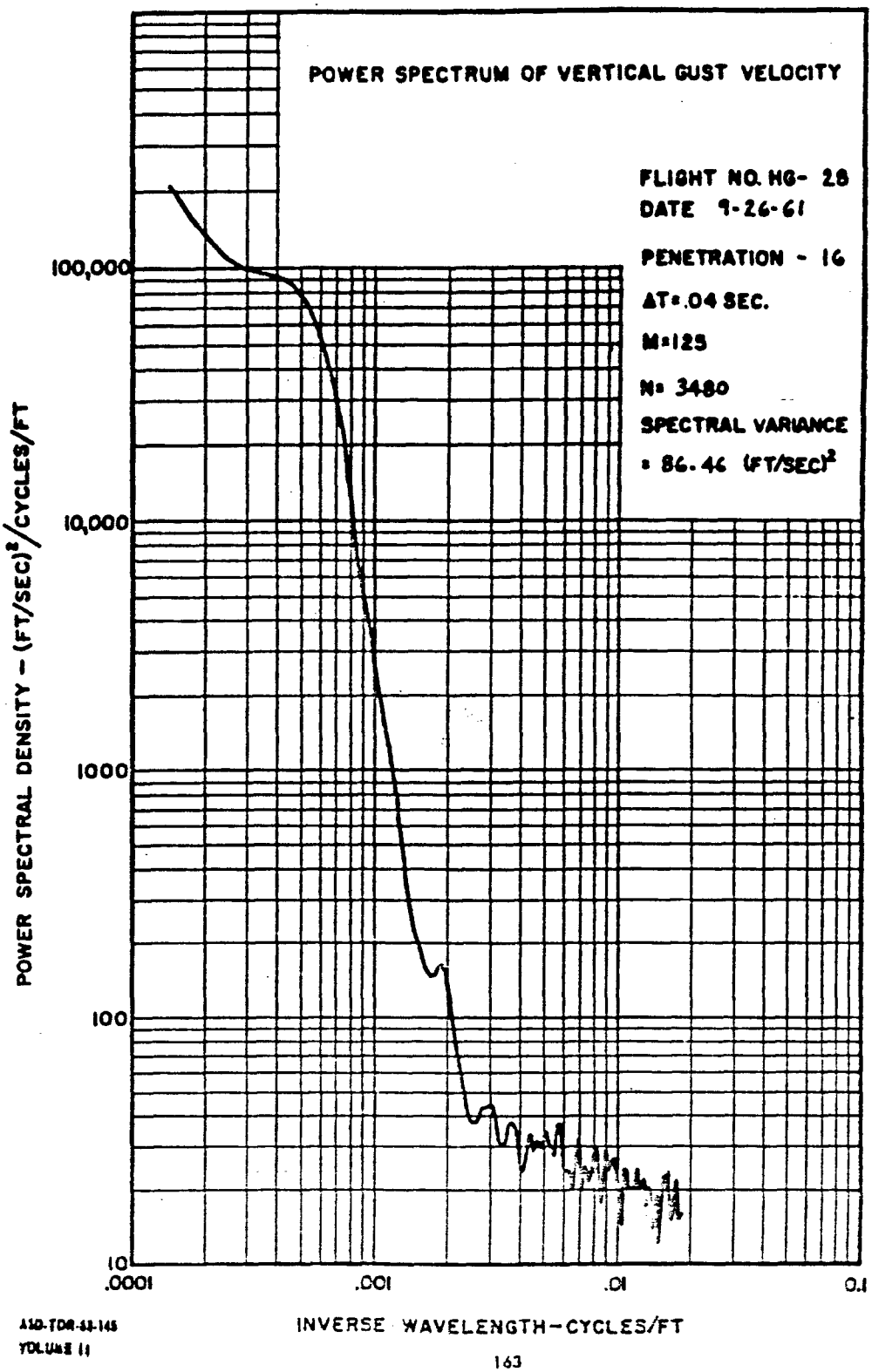

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 3450
SPECTRAL VARIANCE
= 1.55 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

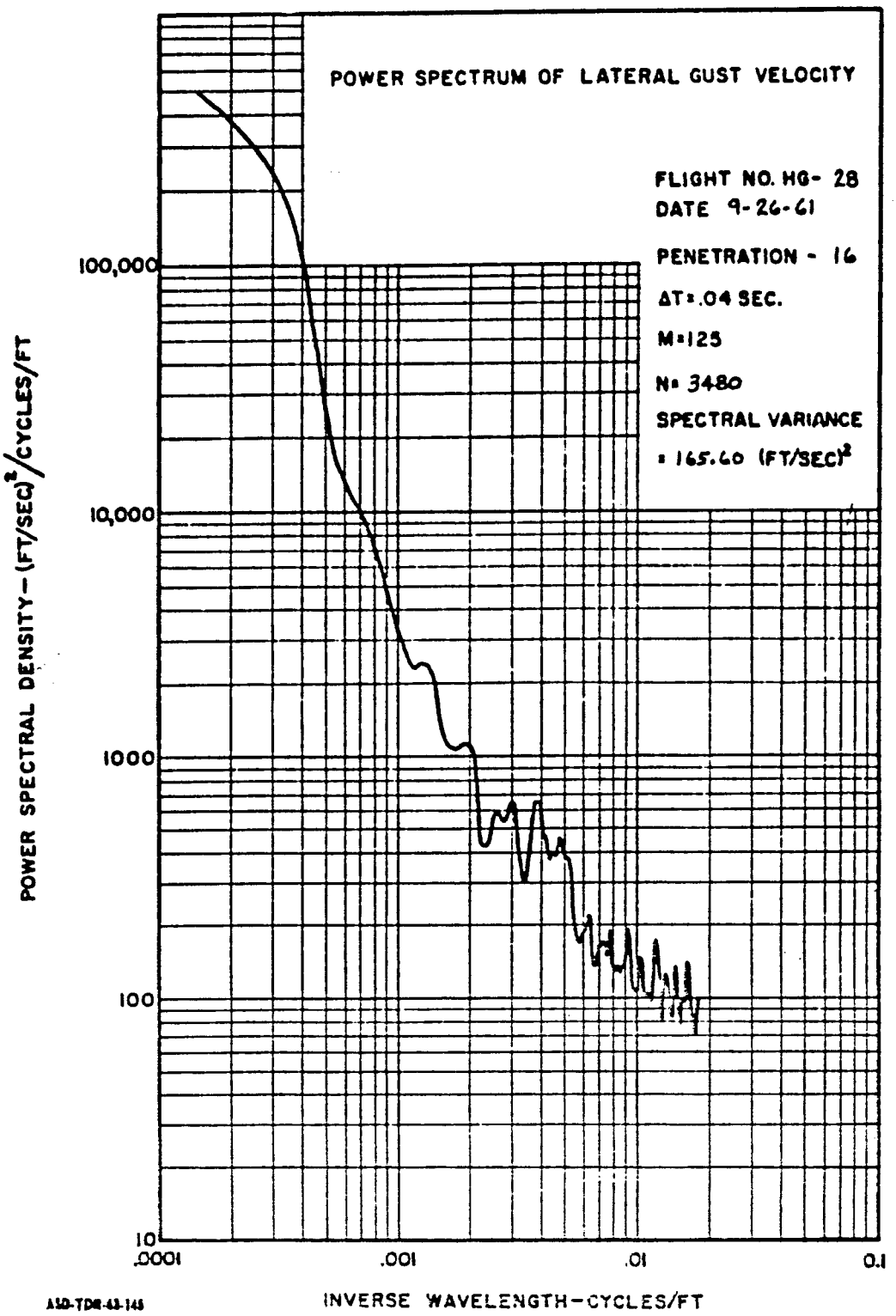

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 3450
SPECTRAL VARIANCE
= 64.78 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT


POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 1870
SPECTRAL VARIANCE
= 46.21 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

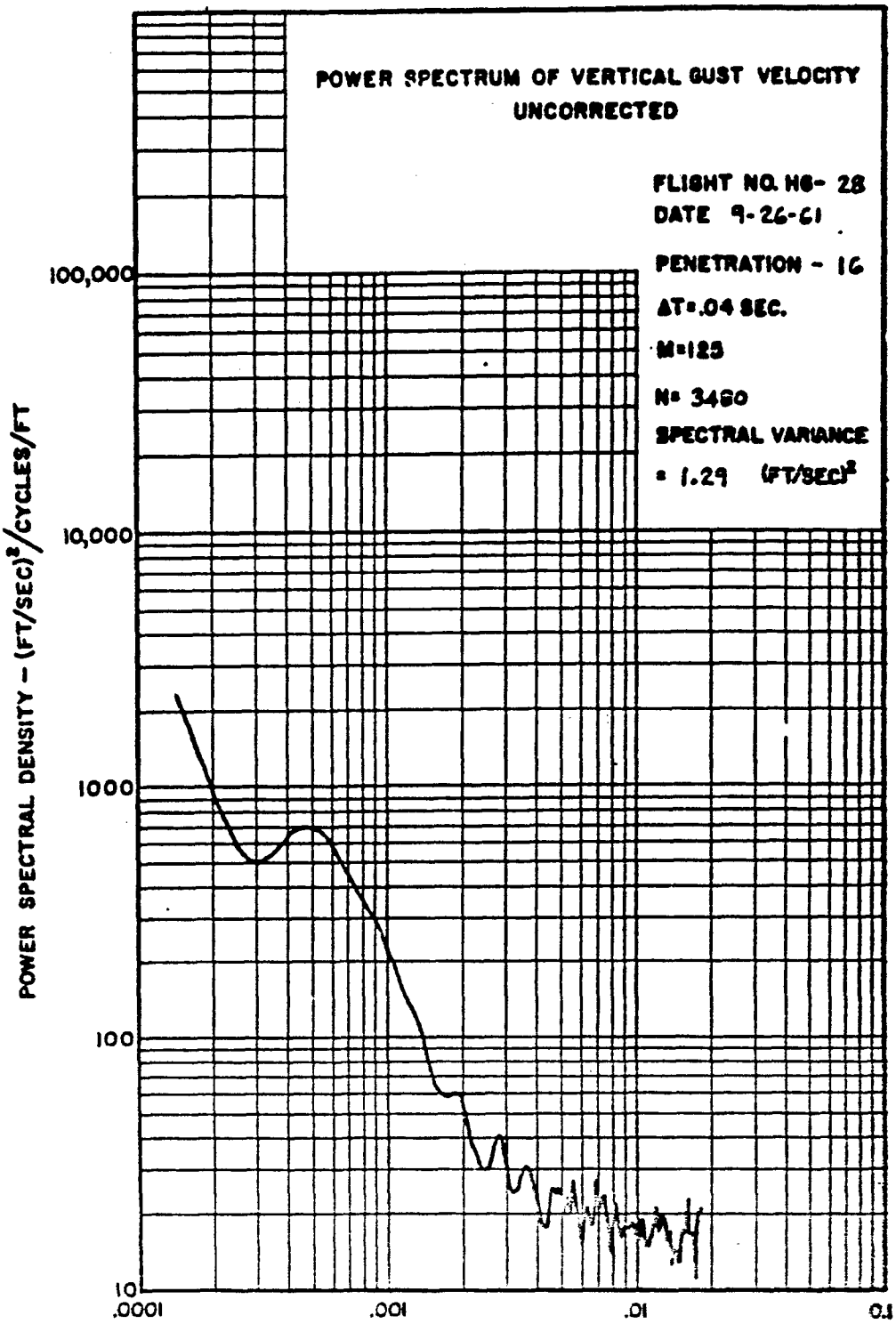

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 1870
SPECTRAL VARIANCE
= 110.26 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

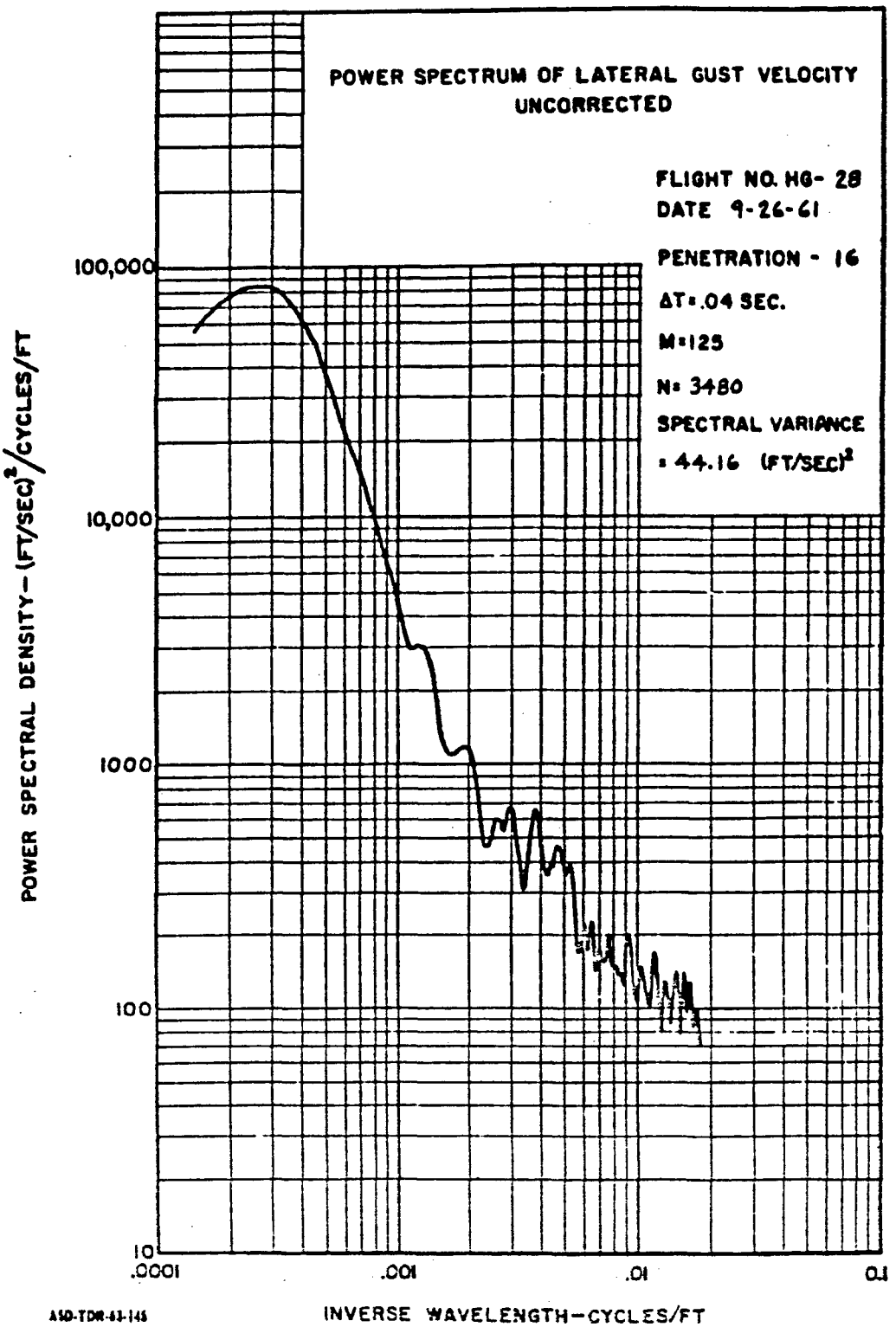

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H8- 28
DATE 9-26-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 1870
SPECTRAL VARIANCE
= 0.47 (FT/SEC)².
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

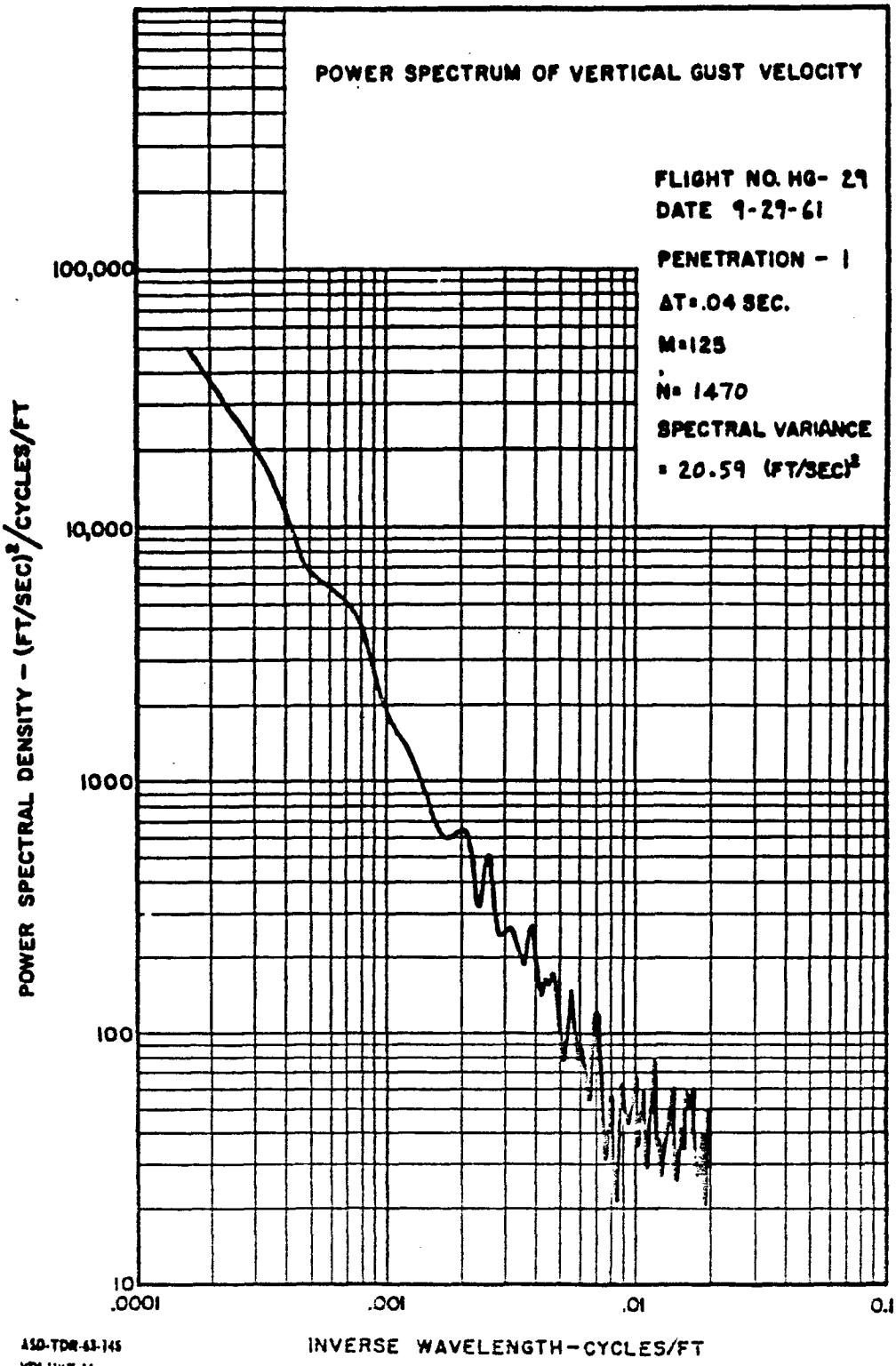

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 16
ΔT=.04 SEC.
M=125
N= 3480
SPECTRAL VARIANCE
= 86.46 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

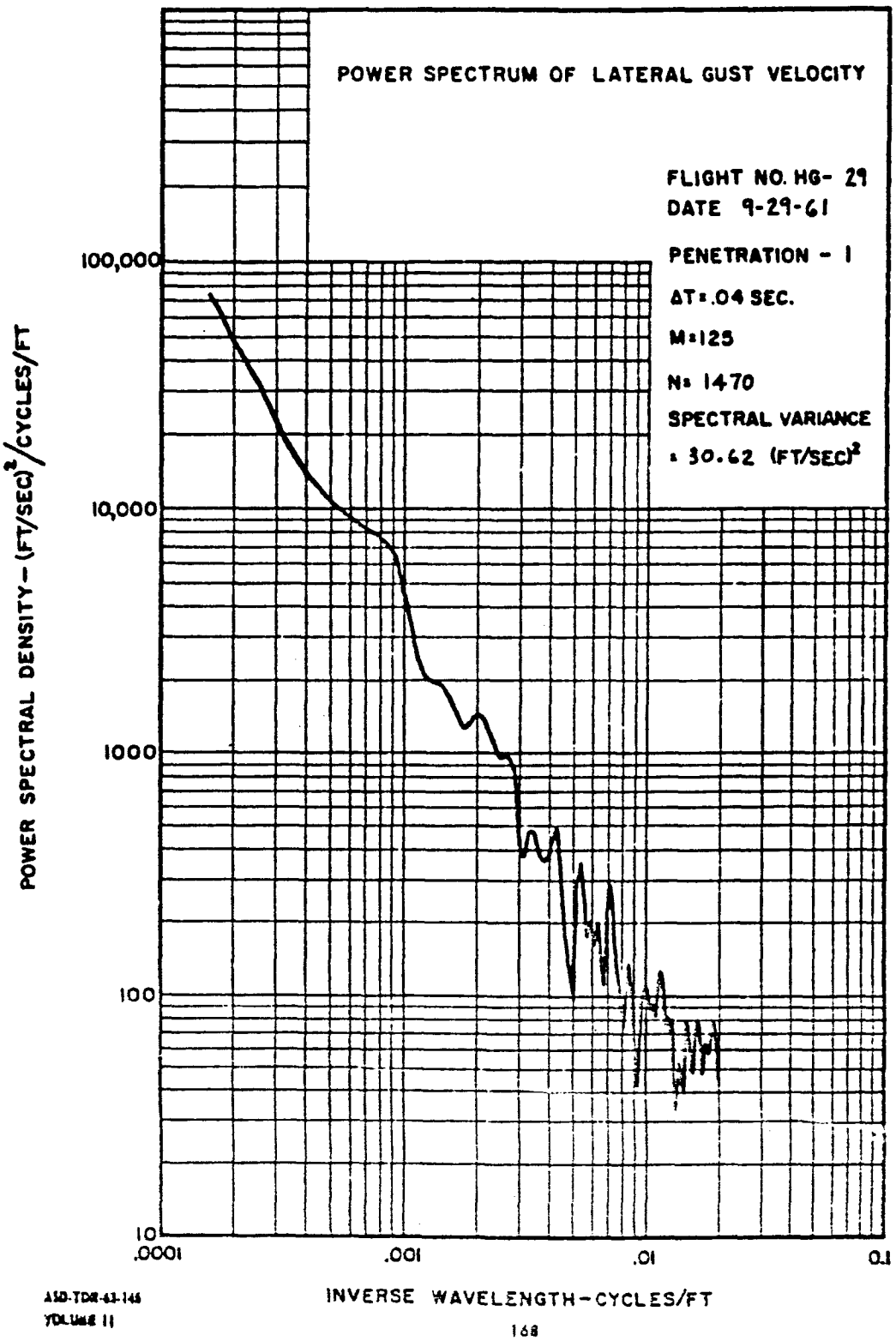


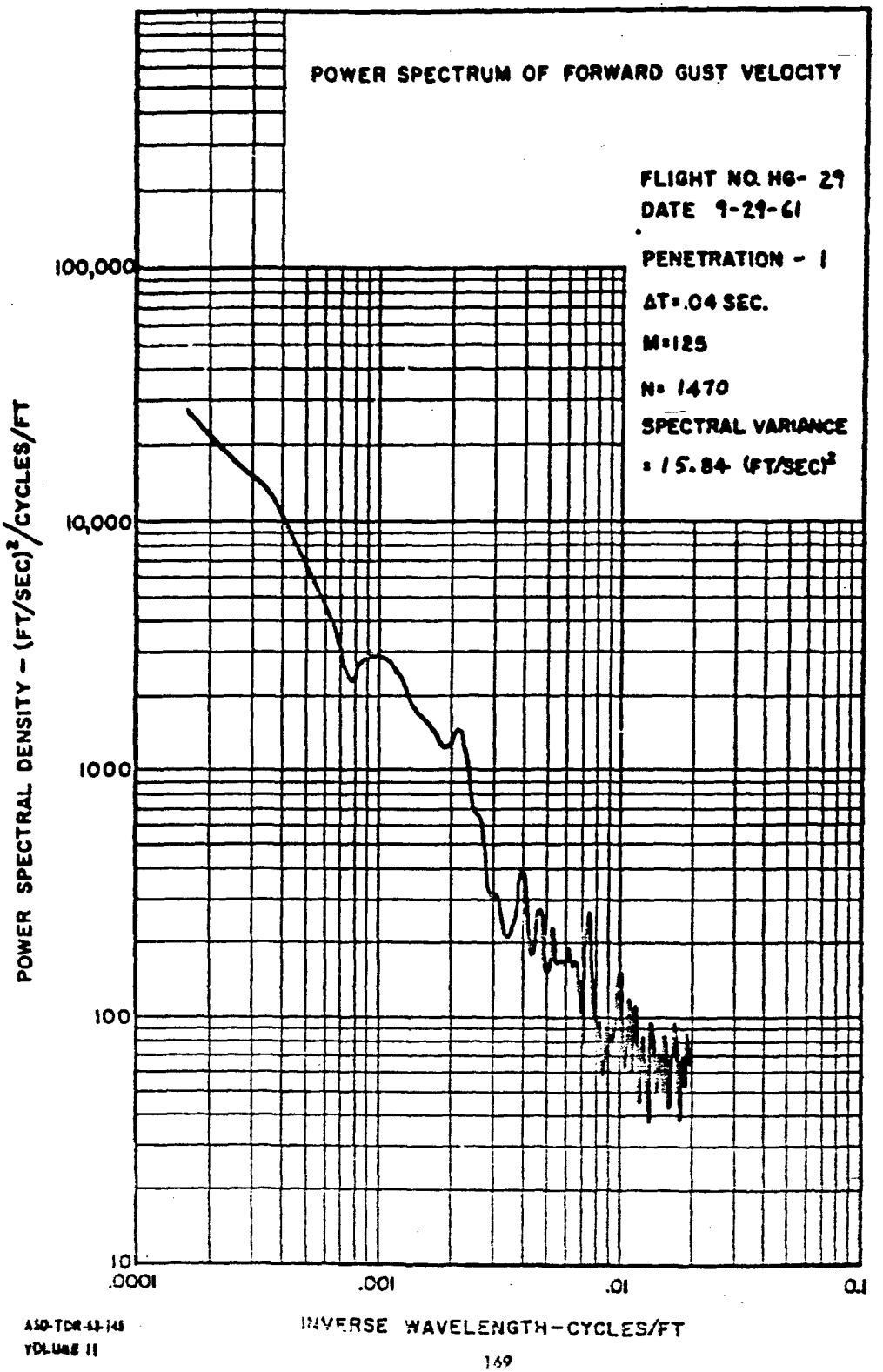
A10-TDR-63-145
YDL-Unit II

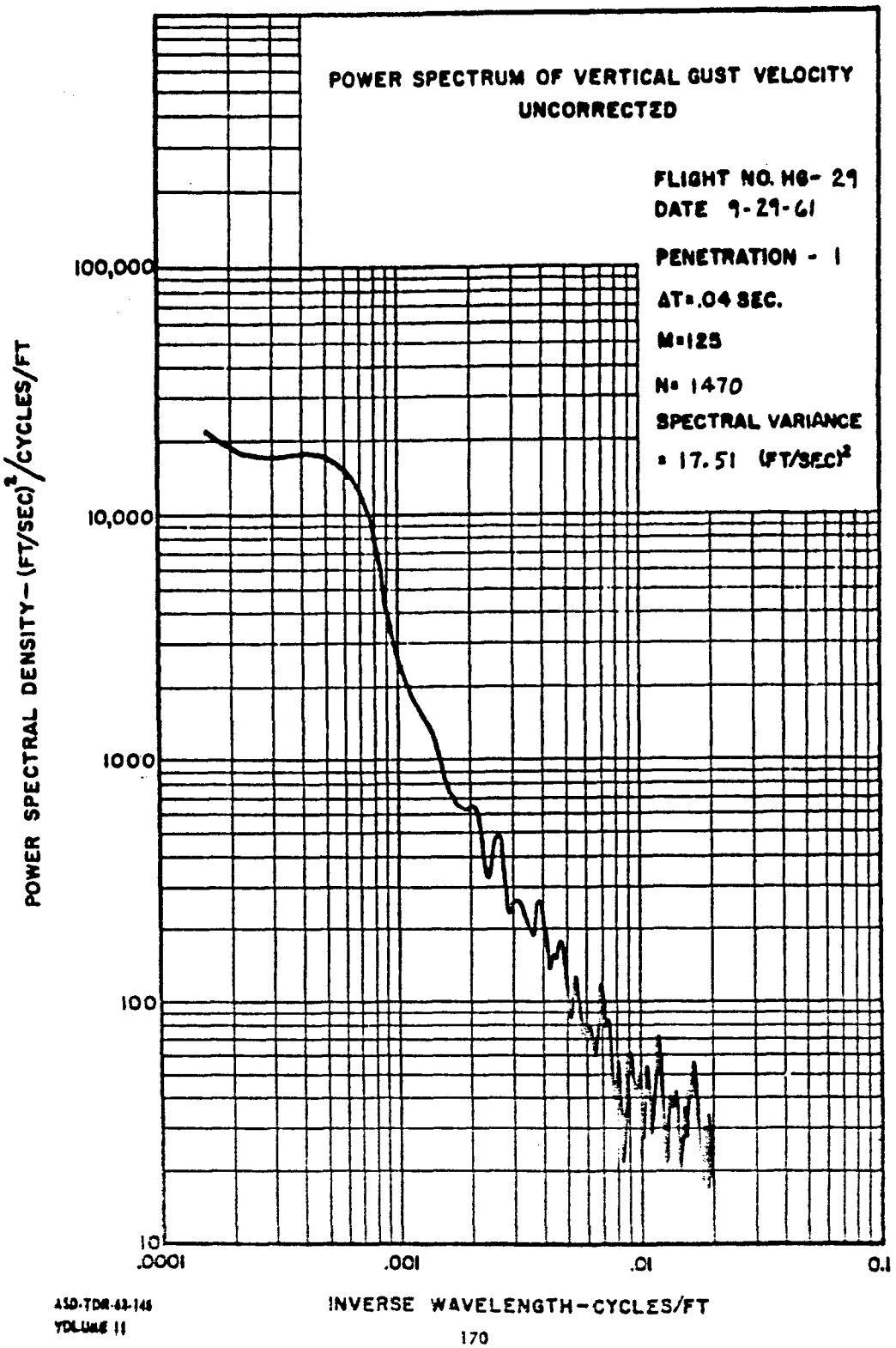

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 28
DATE 9-26-61
PENETRATION - 16
ΔT=.04 SEC.
M=125
N= 3480
SPECTRAL VARIANCE
= 1.29 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

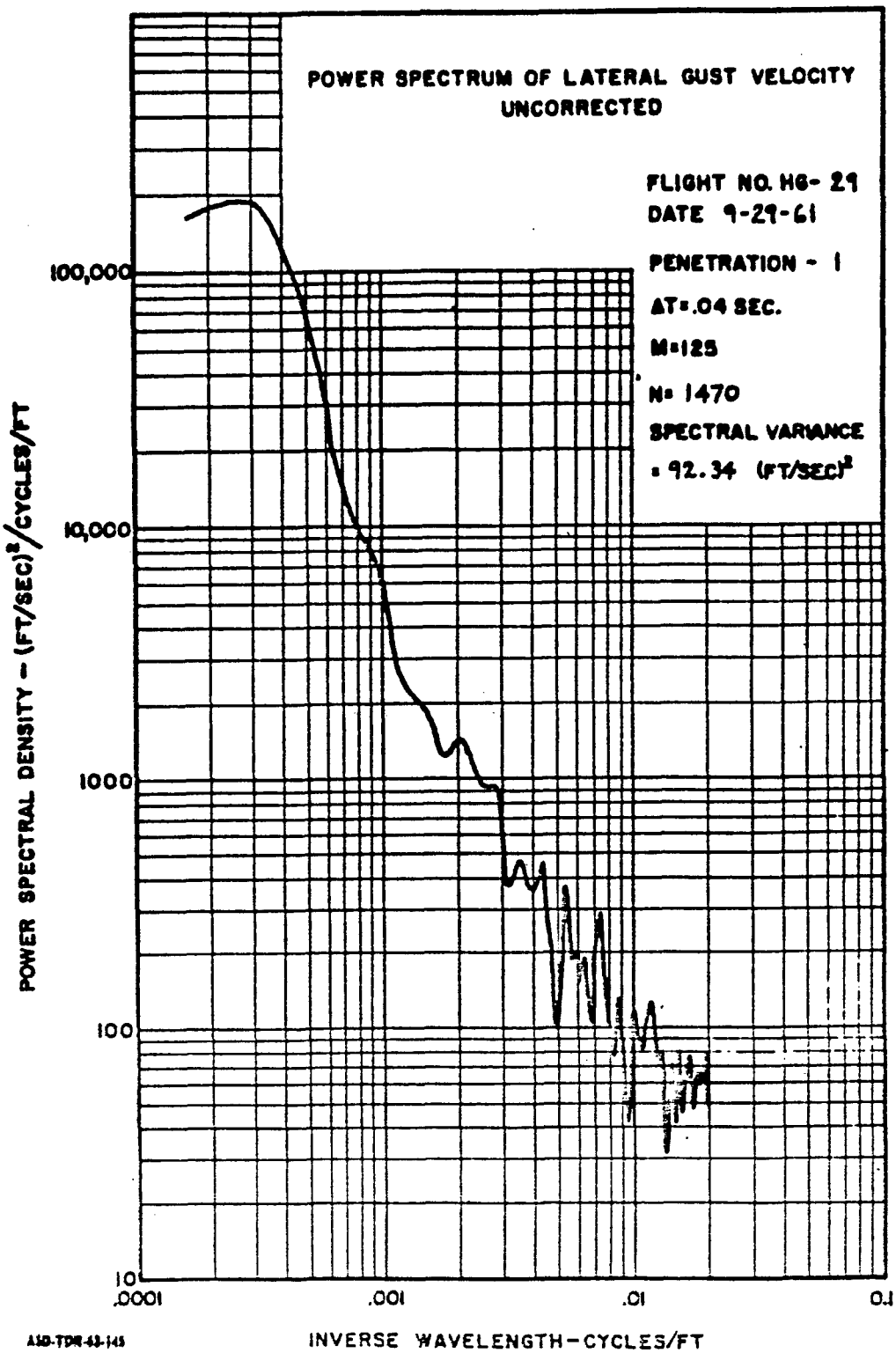

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 28
DATE 9-26-61
PENETRATION - 16
ΔT = .04 SEC.
M = 125
N = 3480
SPECTRAL VARIANCE
= 44.16 (FT/SEC)²
POWER SPECTRAL DENSITY — (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH — CYCLES/FT

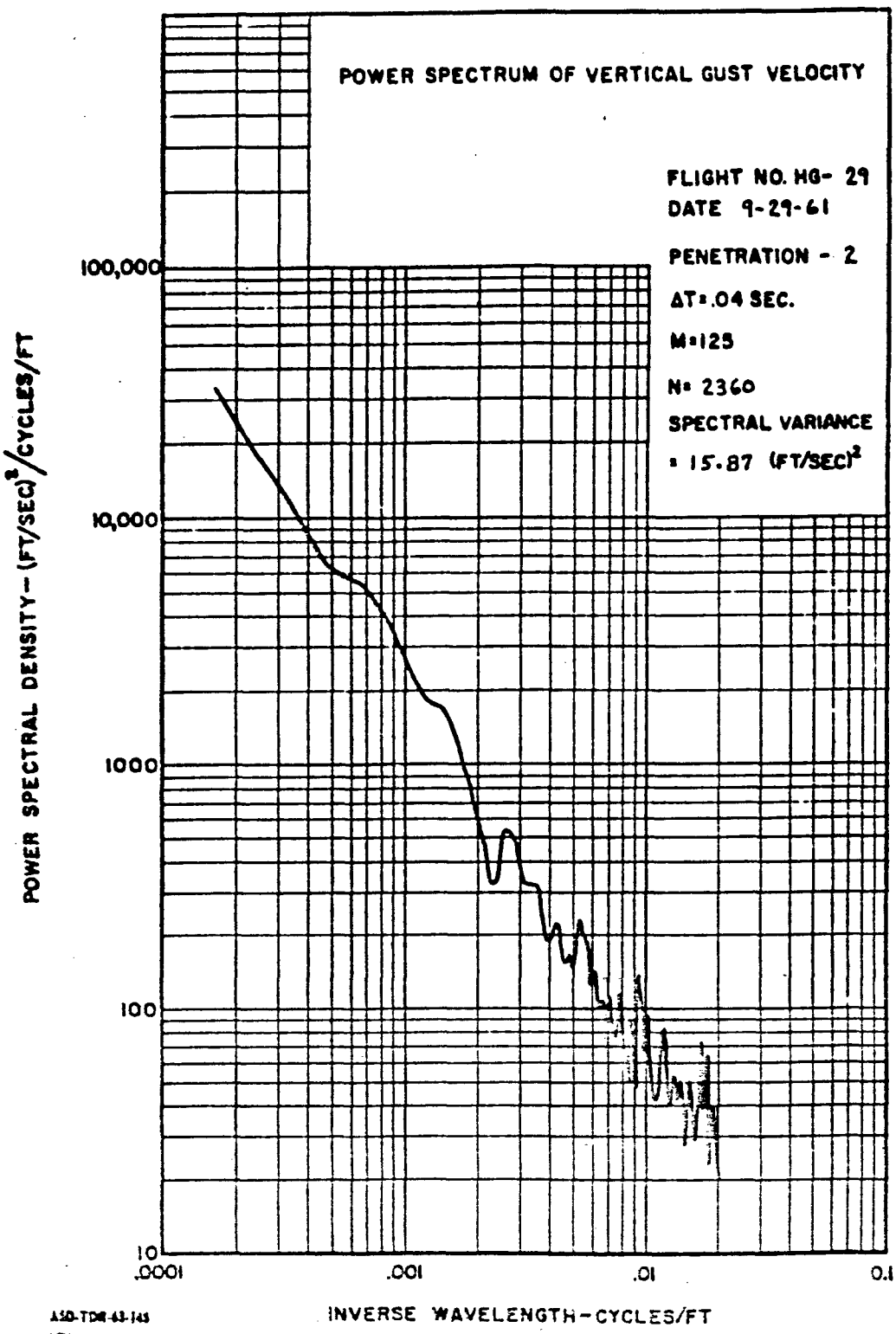

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 1470
SPECTRAL VARIANCE
= 20.59 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

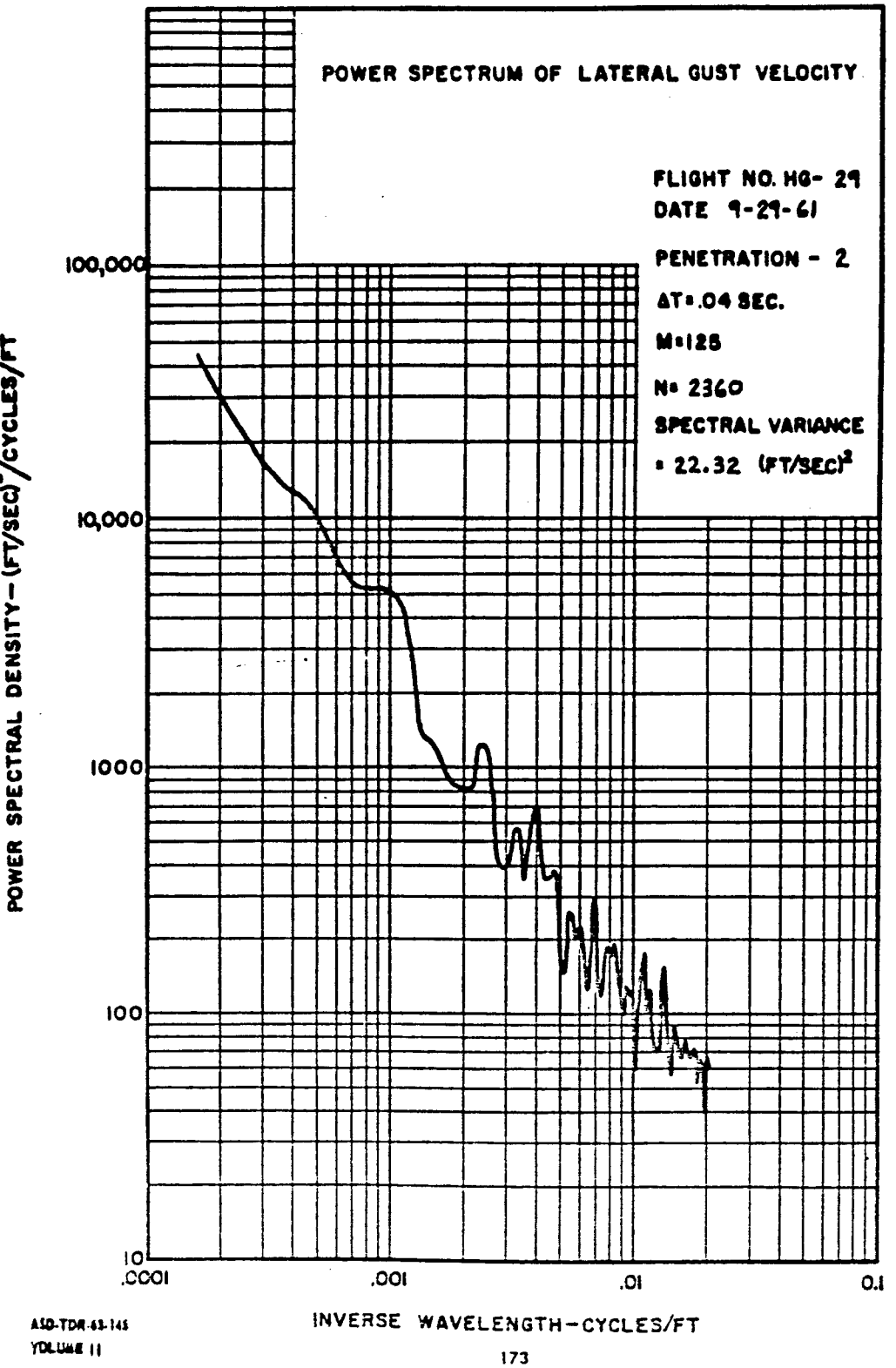

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 1470
SPECTRAL VARIANCE
= 30.62 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

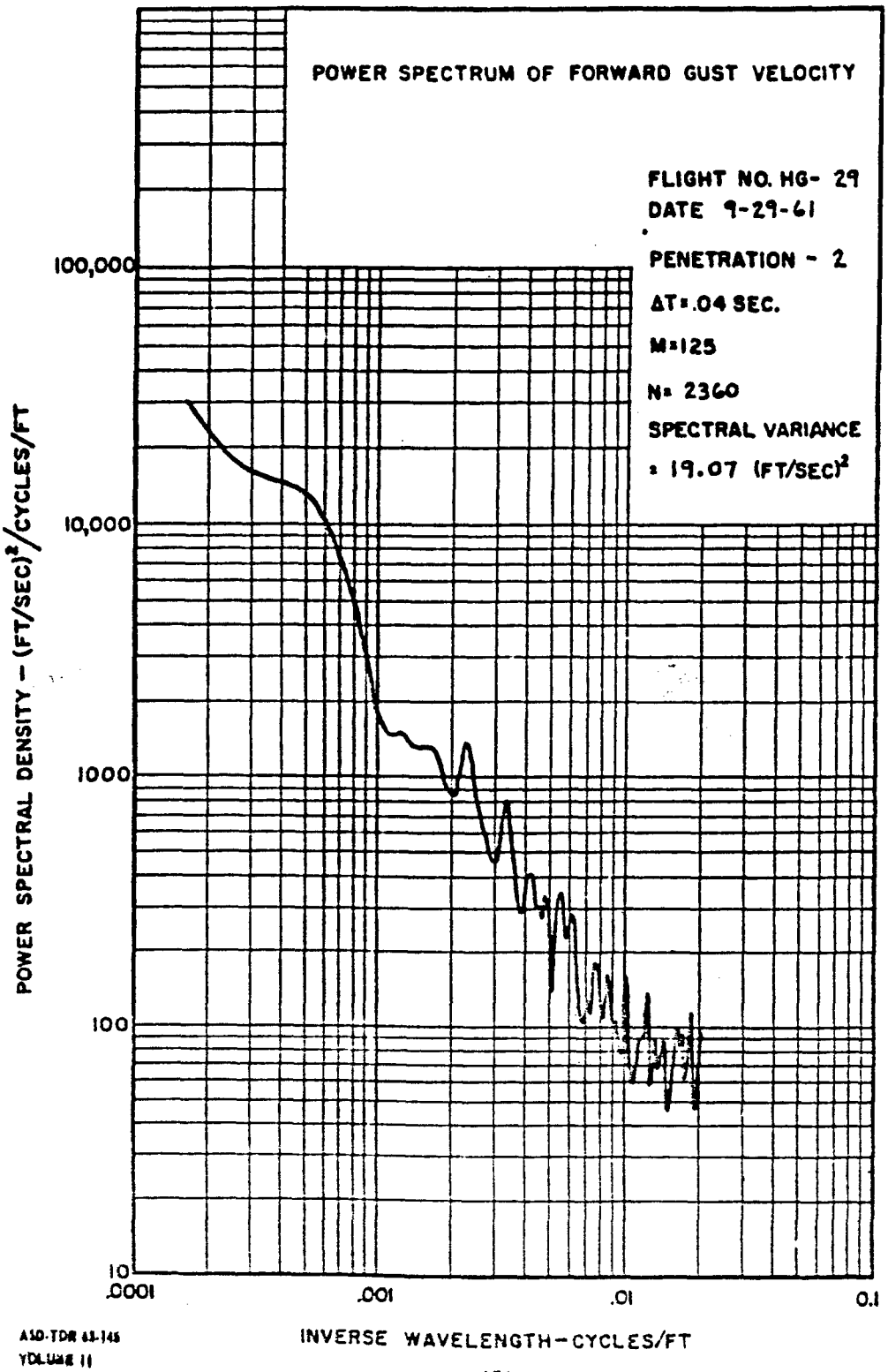

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 1470
SPECTRAL VARIANCE
= 15.84 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

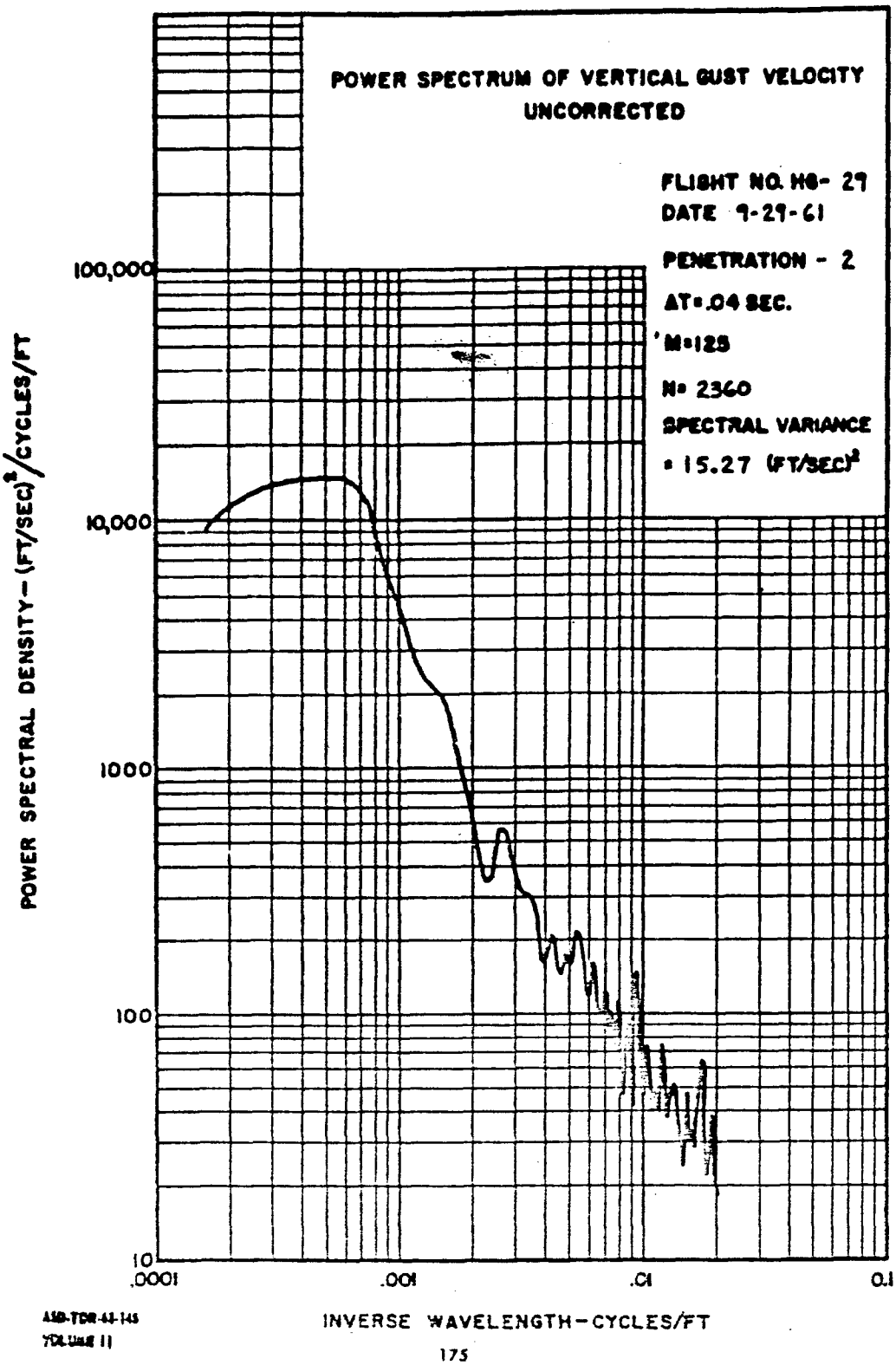

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 29
DATE 9-29-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 1470
SPECTRAL VARIANCE
= 17.51 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT


POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 29
DATE 9-29-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 1470
SPECTRAL VARIANCE
= 92.34 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

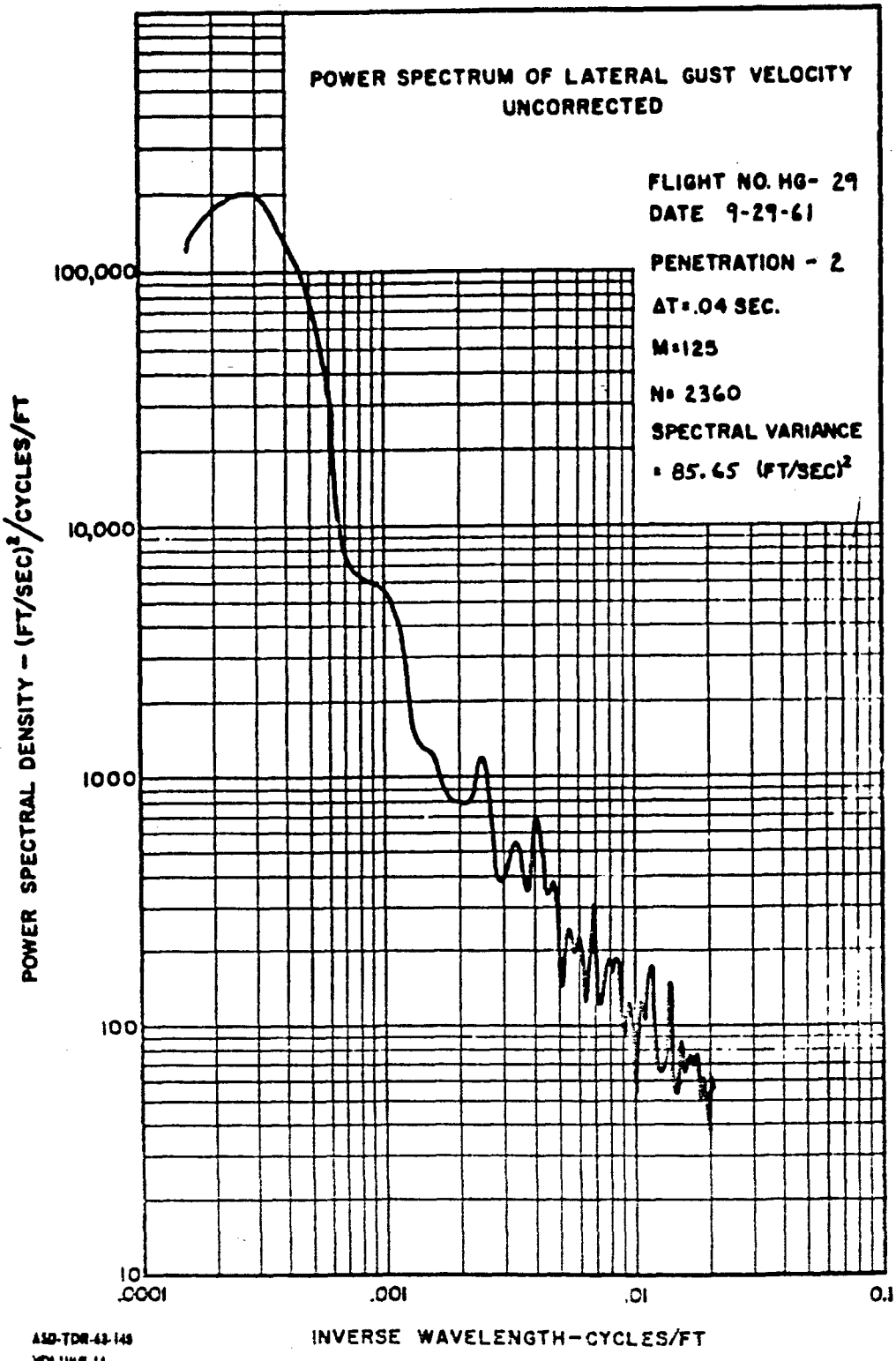

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2360
SPECTRAL VARIANCE
= 15.87 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

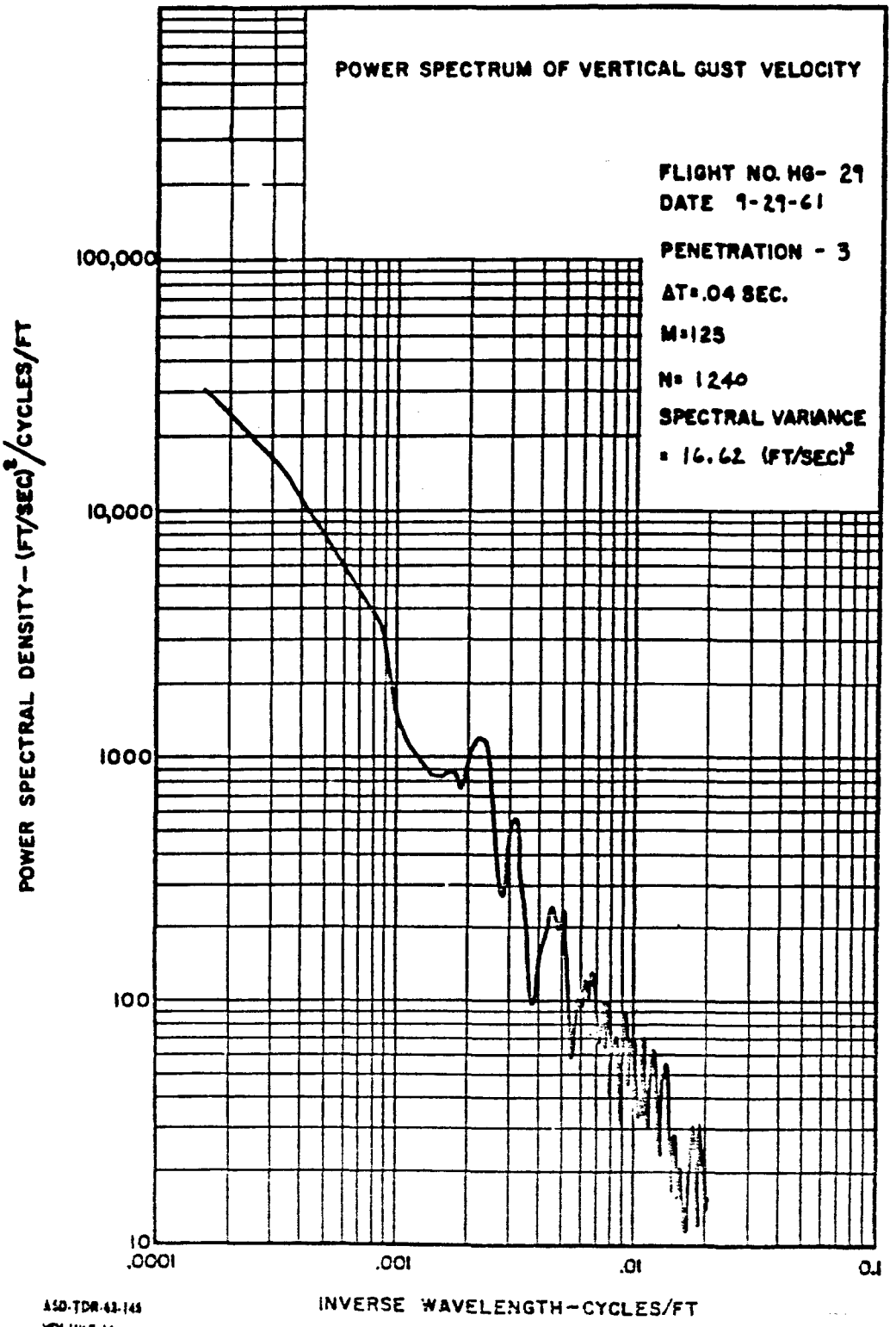

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 2
ΔT=.04 SEC.
M=128
N= 2360
SPECTRAL VARIANCE
= 22.32 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

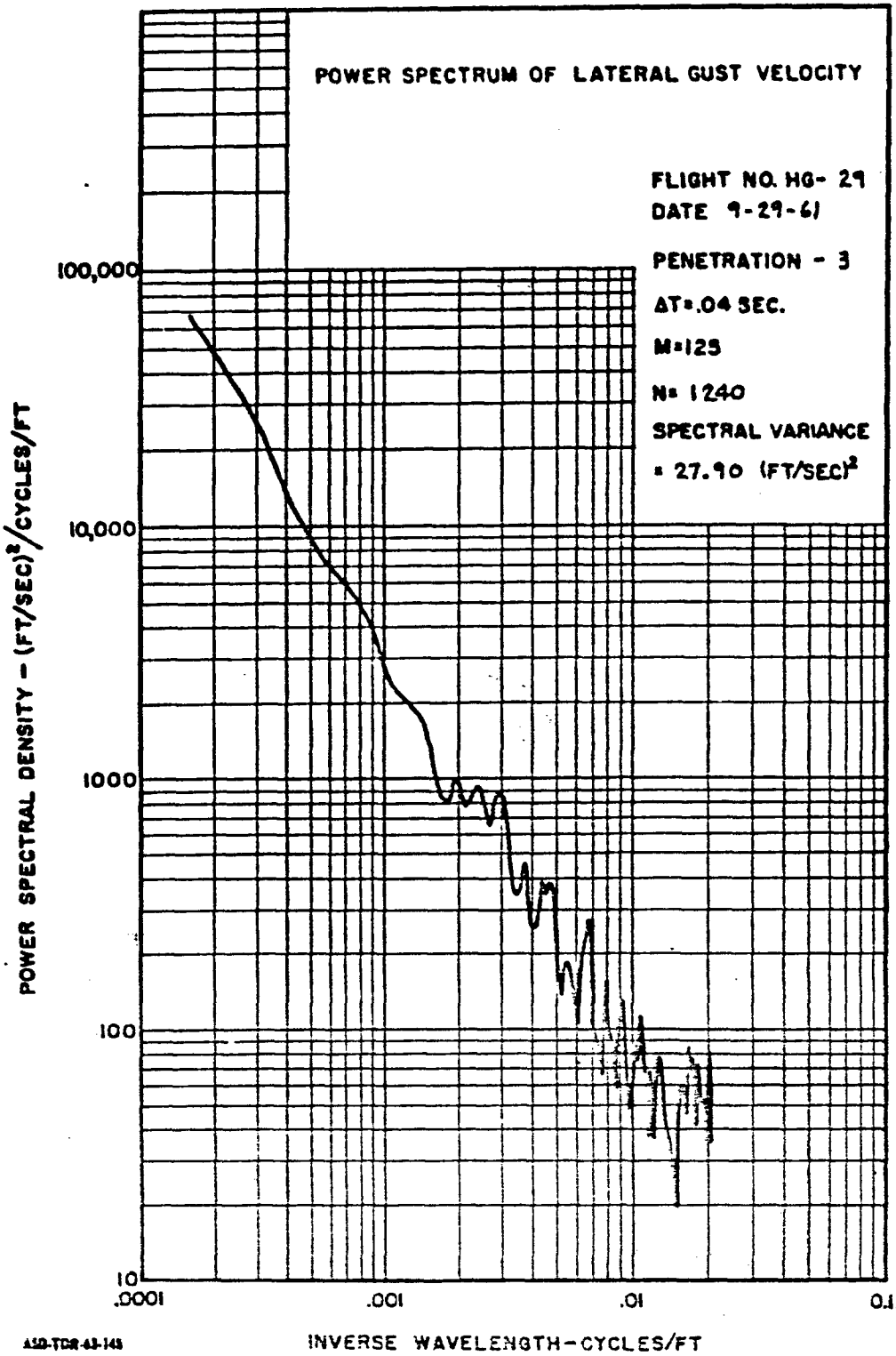

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2360
SPECTRAL VARIANCE
= 19.07 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

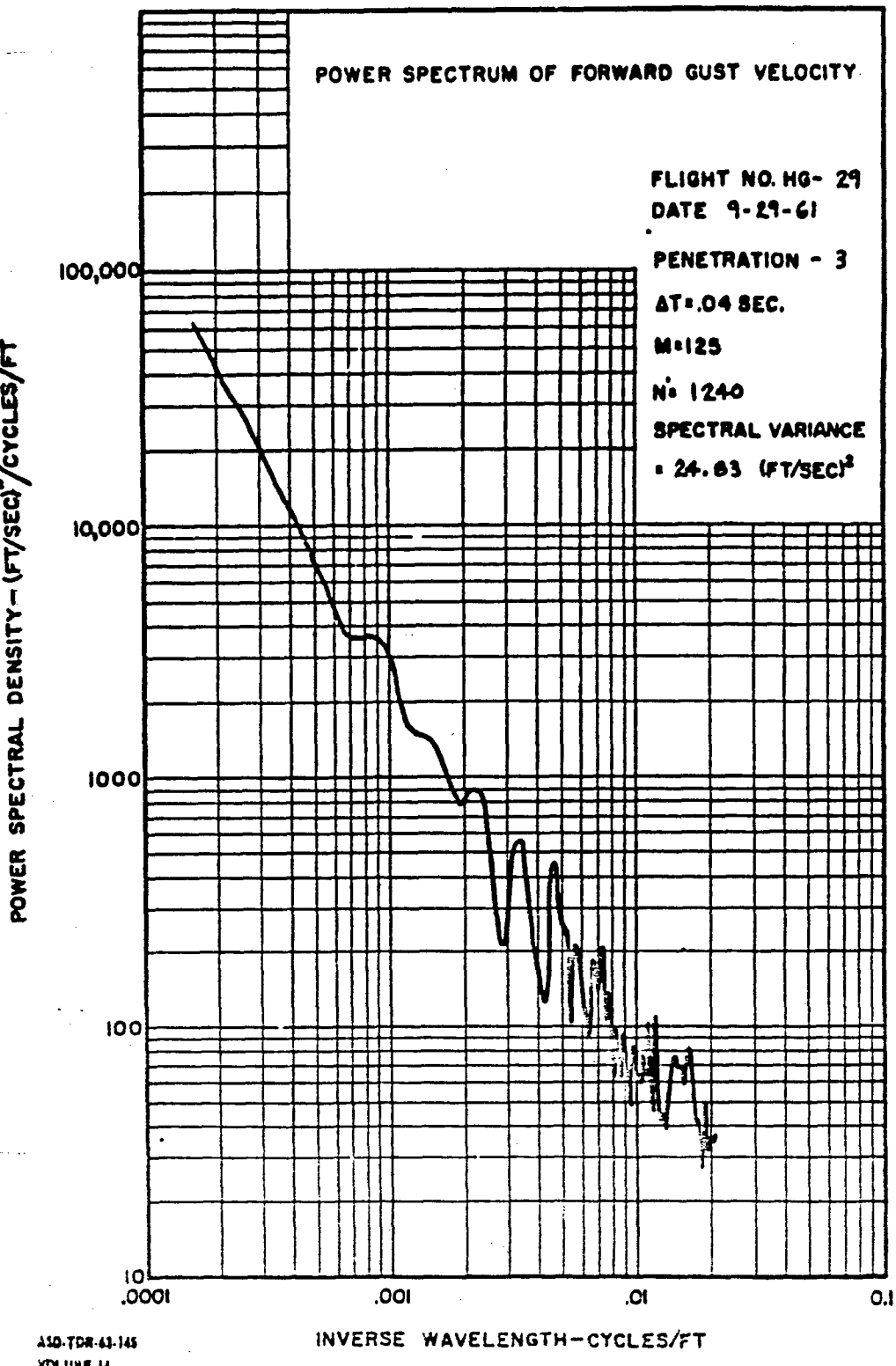


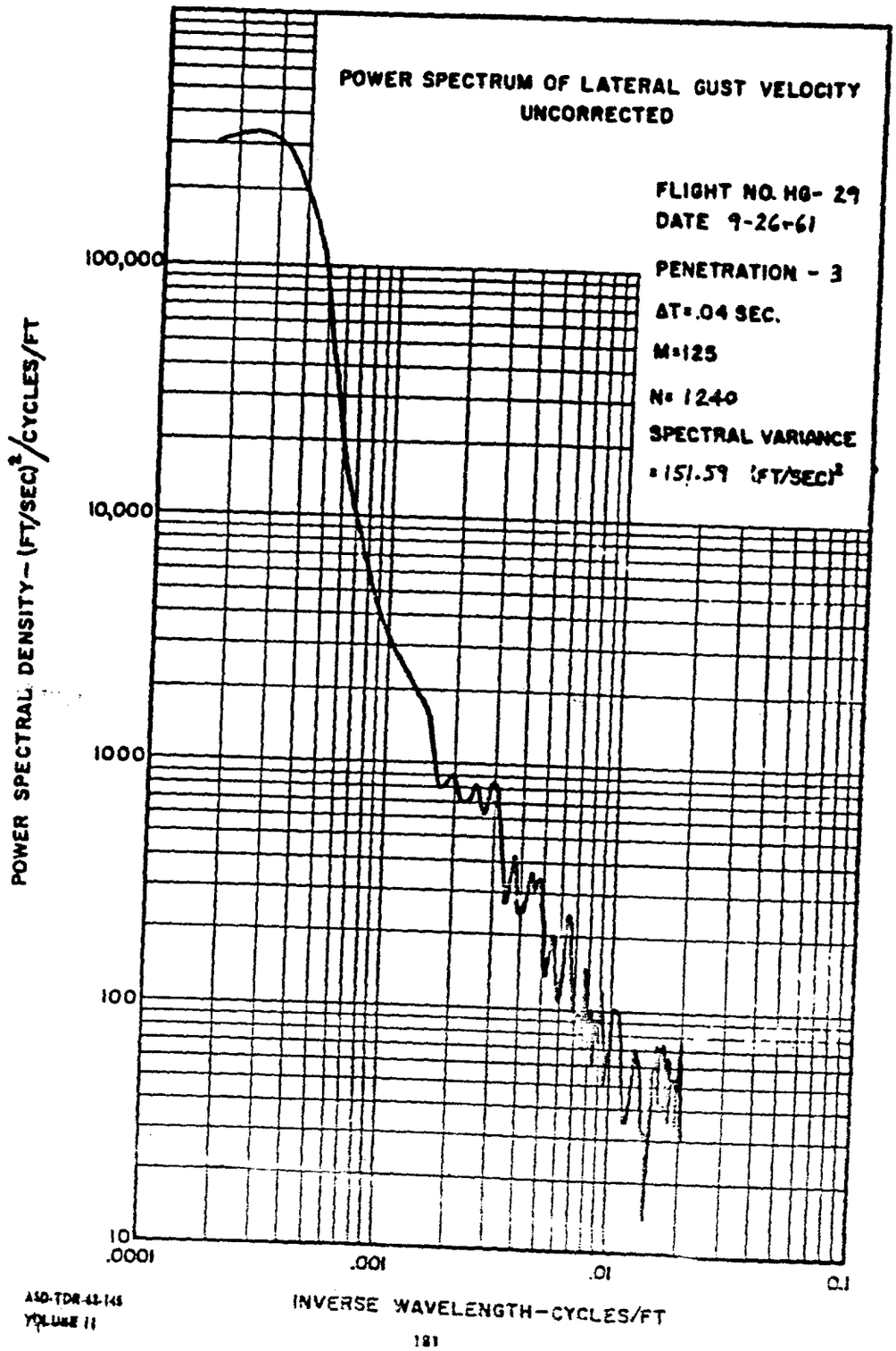
ASD-TDR-62-145
TDL Unit II

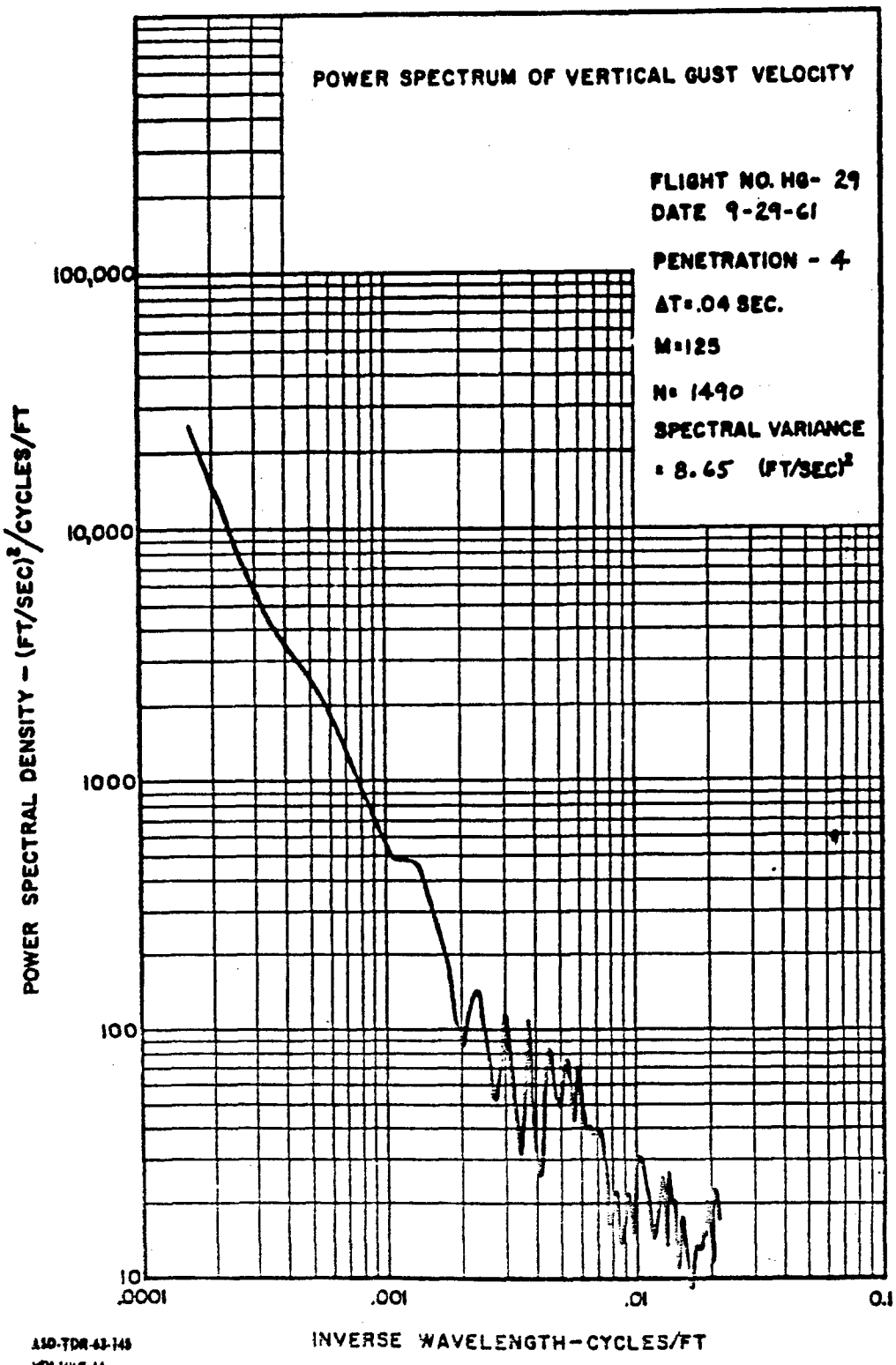

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2360
SPECTRAL VARIANCE
= 85.65 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

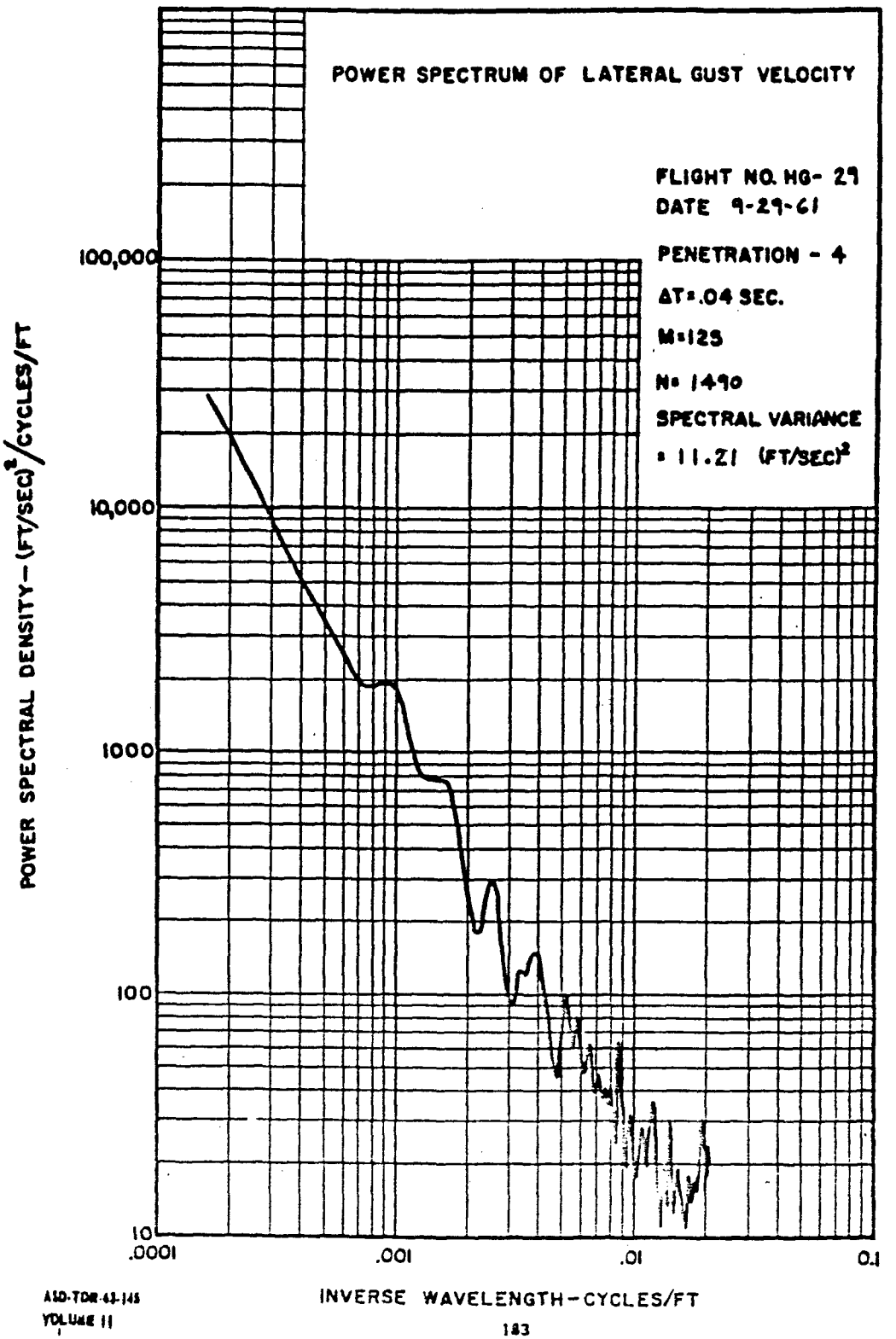

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1240
SPECTRAL VARIANCE
= 16.62 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

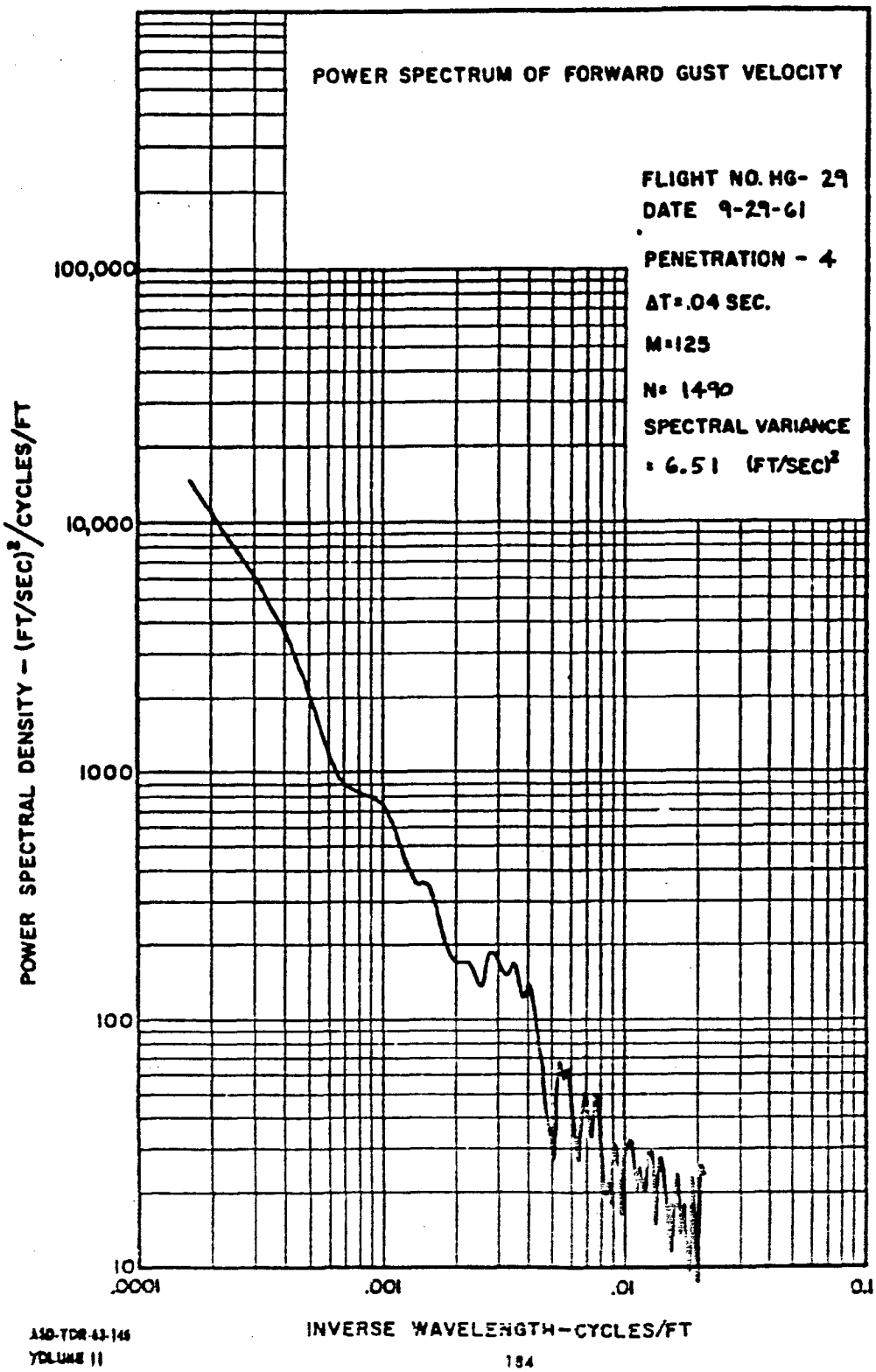

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1240
SPECTRAL VARIANCE
= 27.90 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

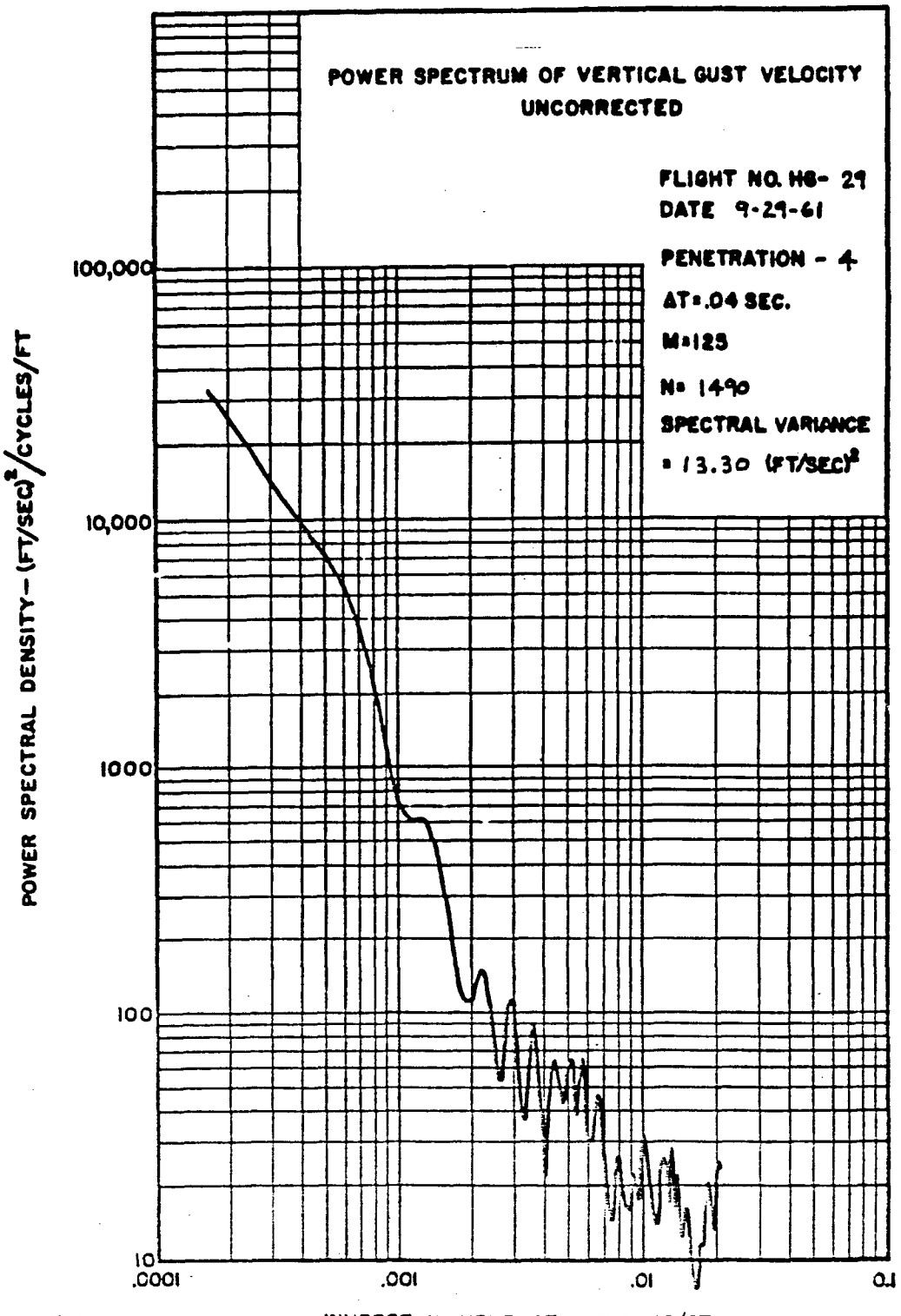

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1240
SPECTRAL VARIANCE
= 24.83 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

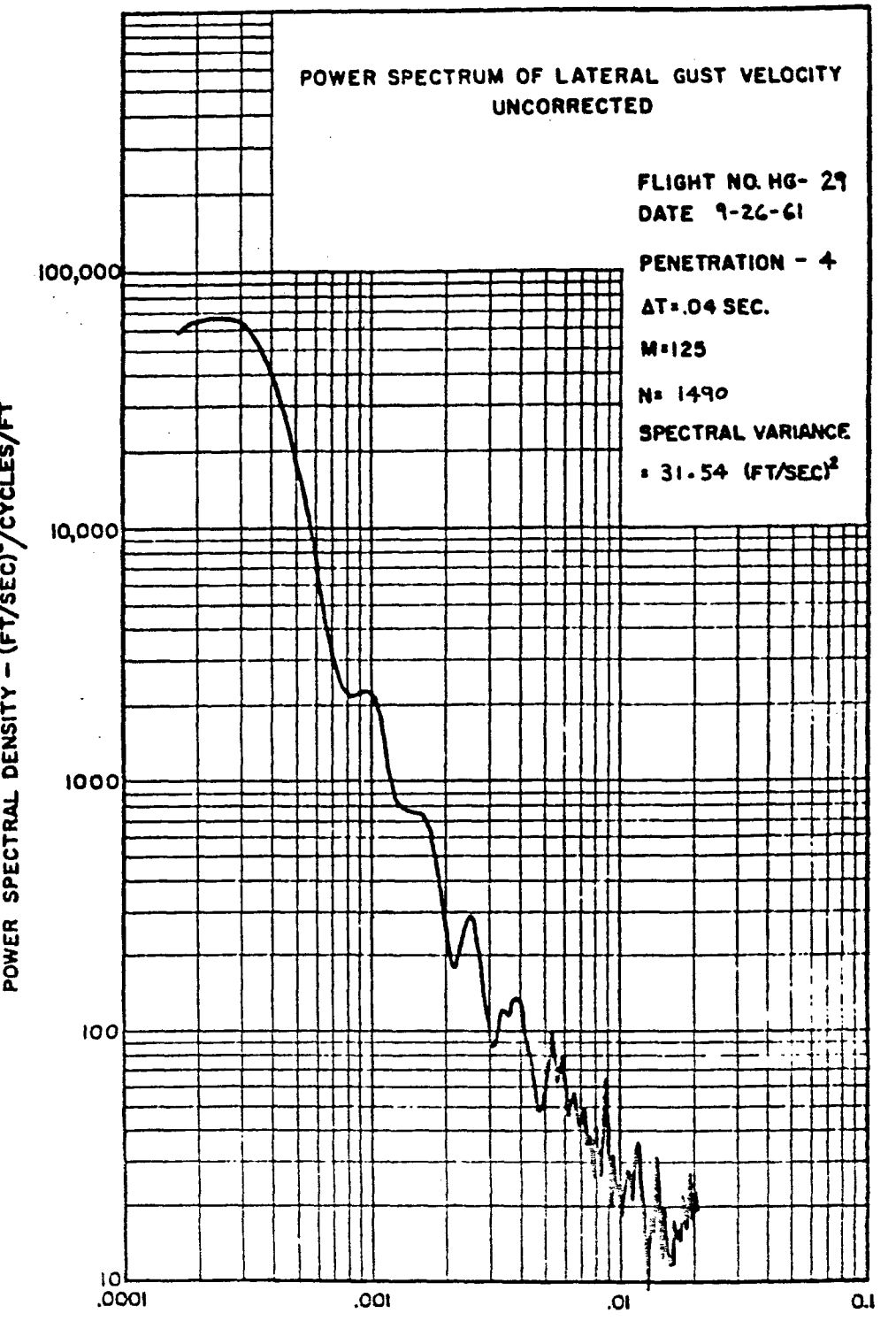

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-26-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 1240
SPECTRAL VARIANCE
=151.59 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

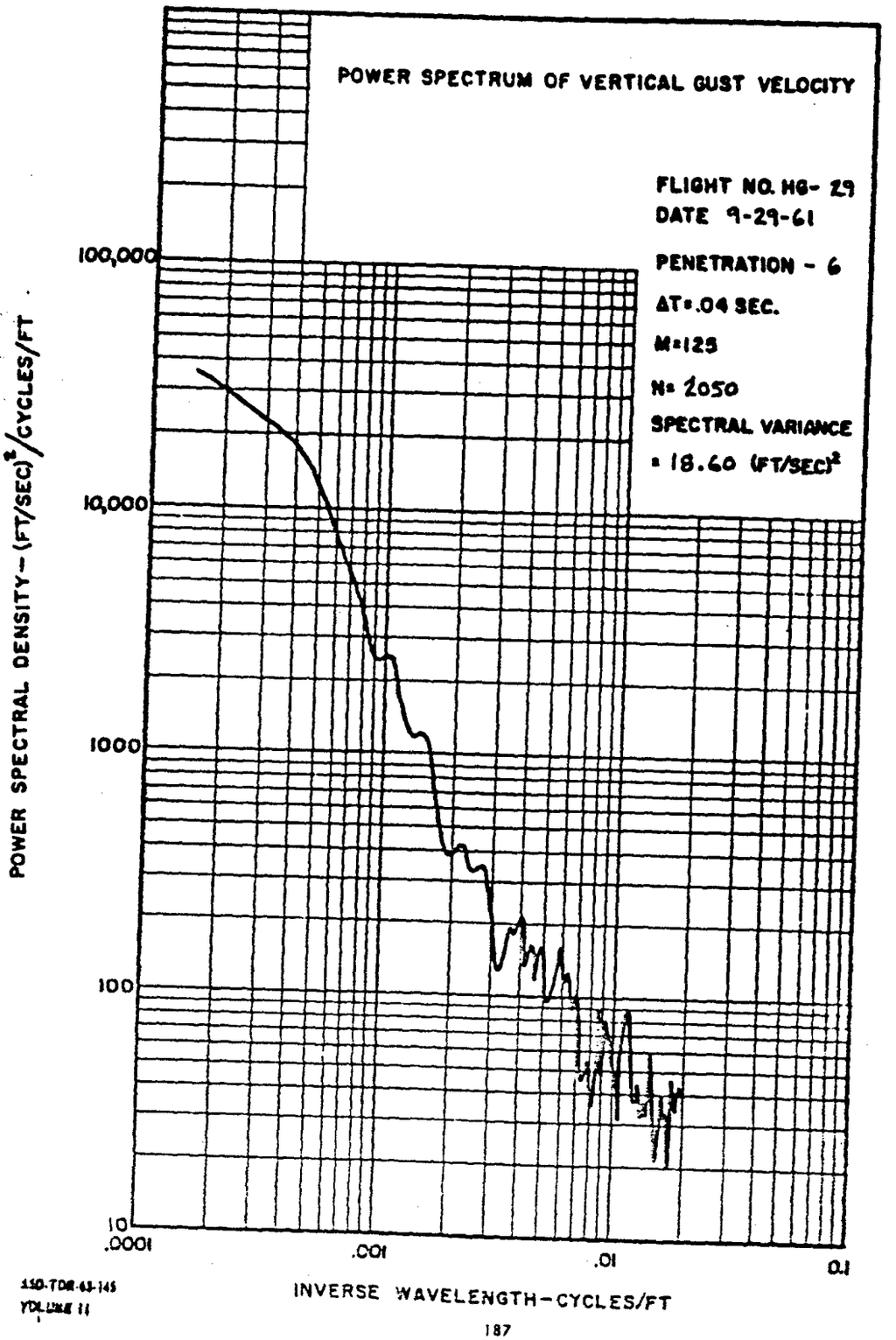

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 8.65 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT


POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 11.21 (FT/SEC)²
POWER SPECTRAL DENSITY — (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH — CYCLES/FT

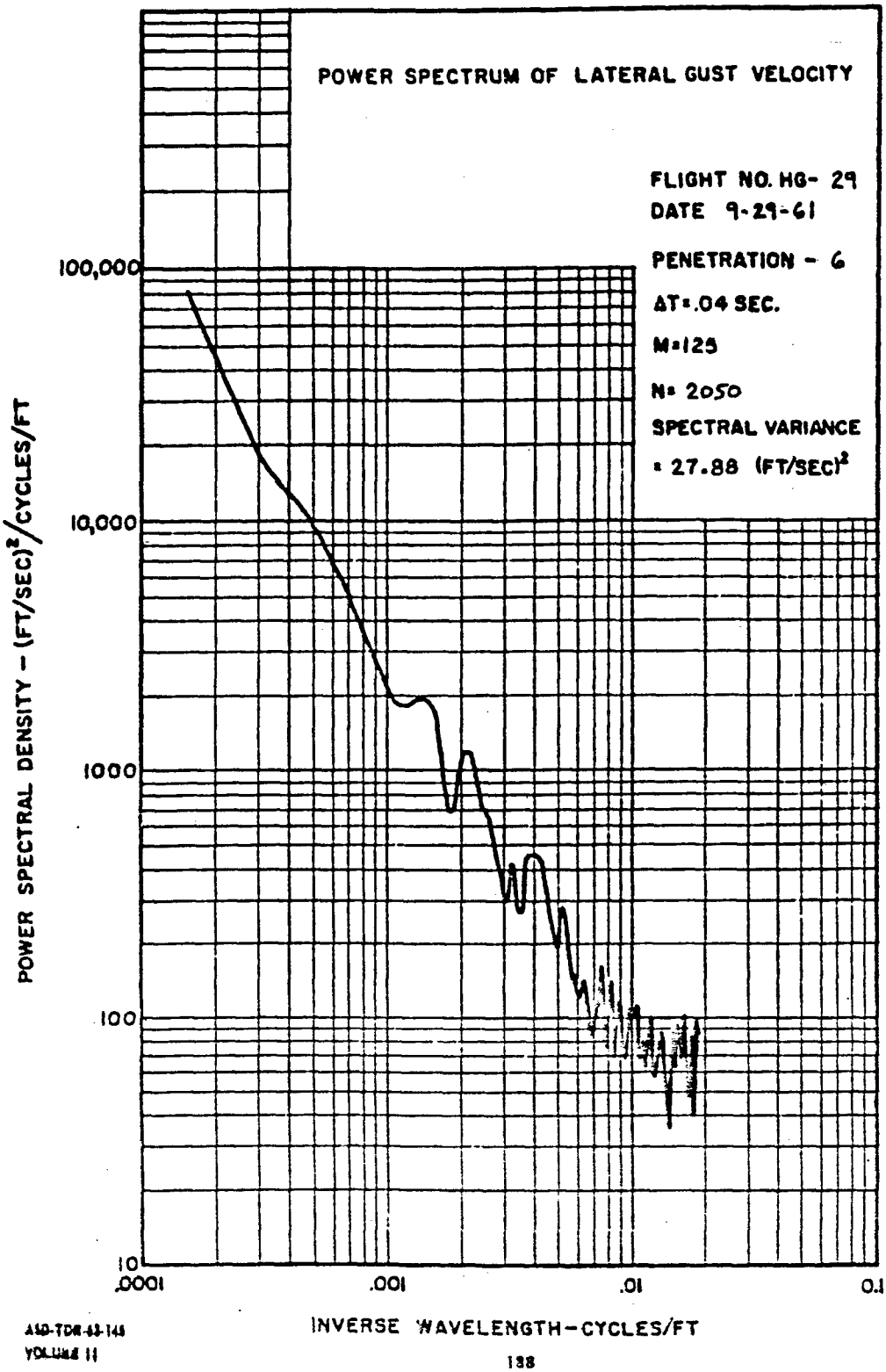

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 6.51 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

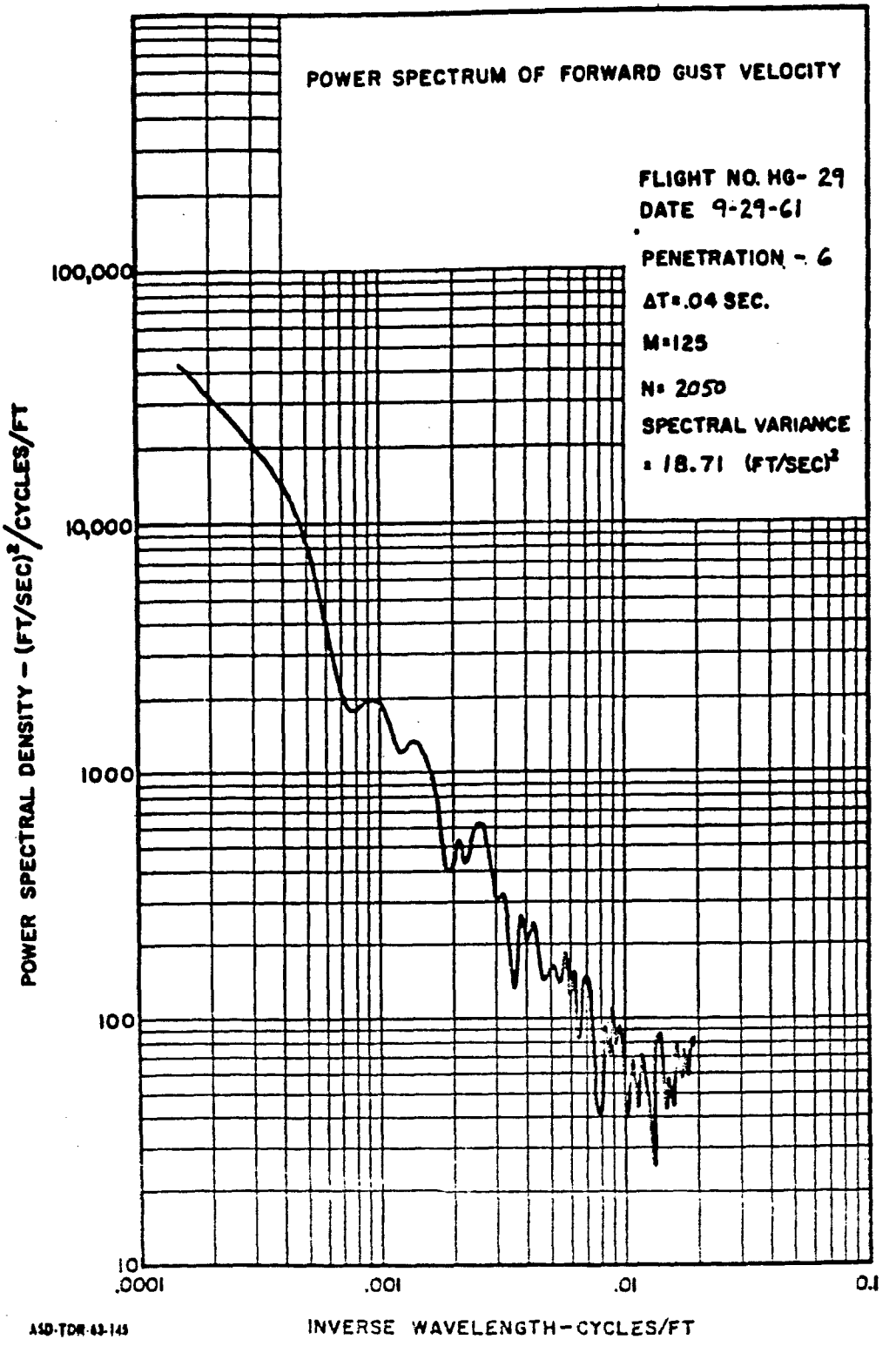

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HS- 29
DATE 9-29-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 13.30 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

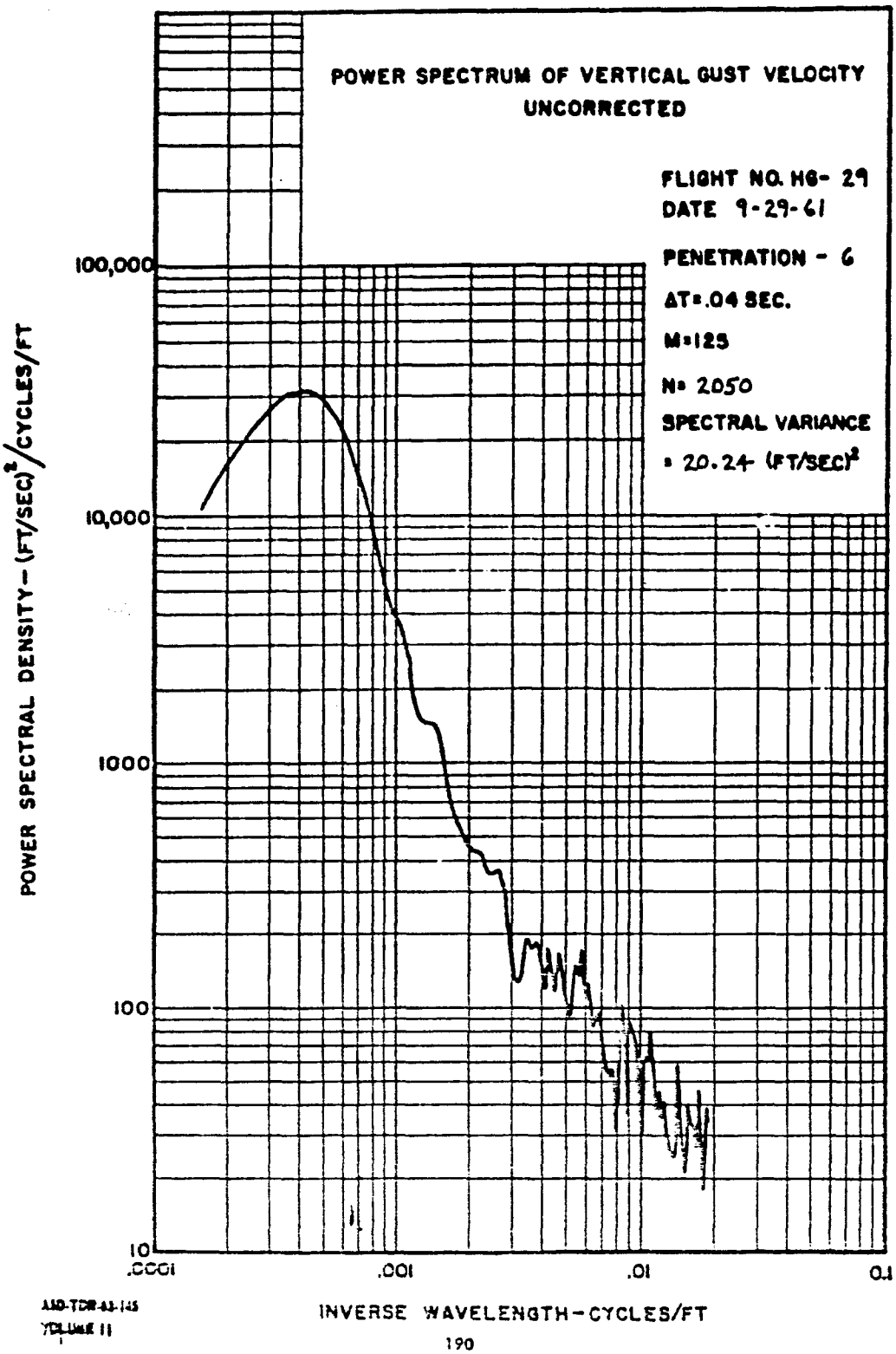

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-26-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 31.54 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

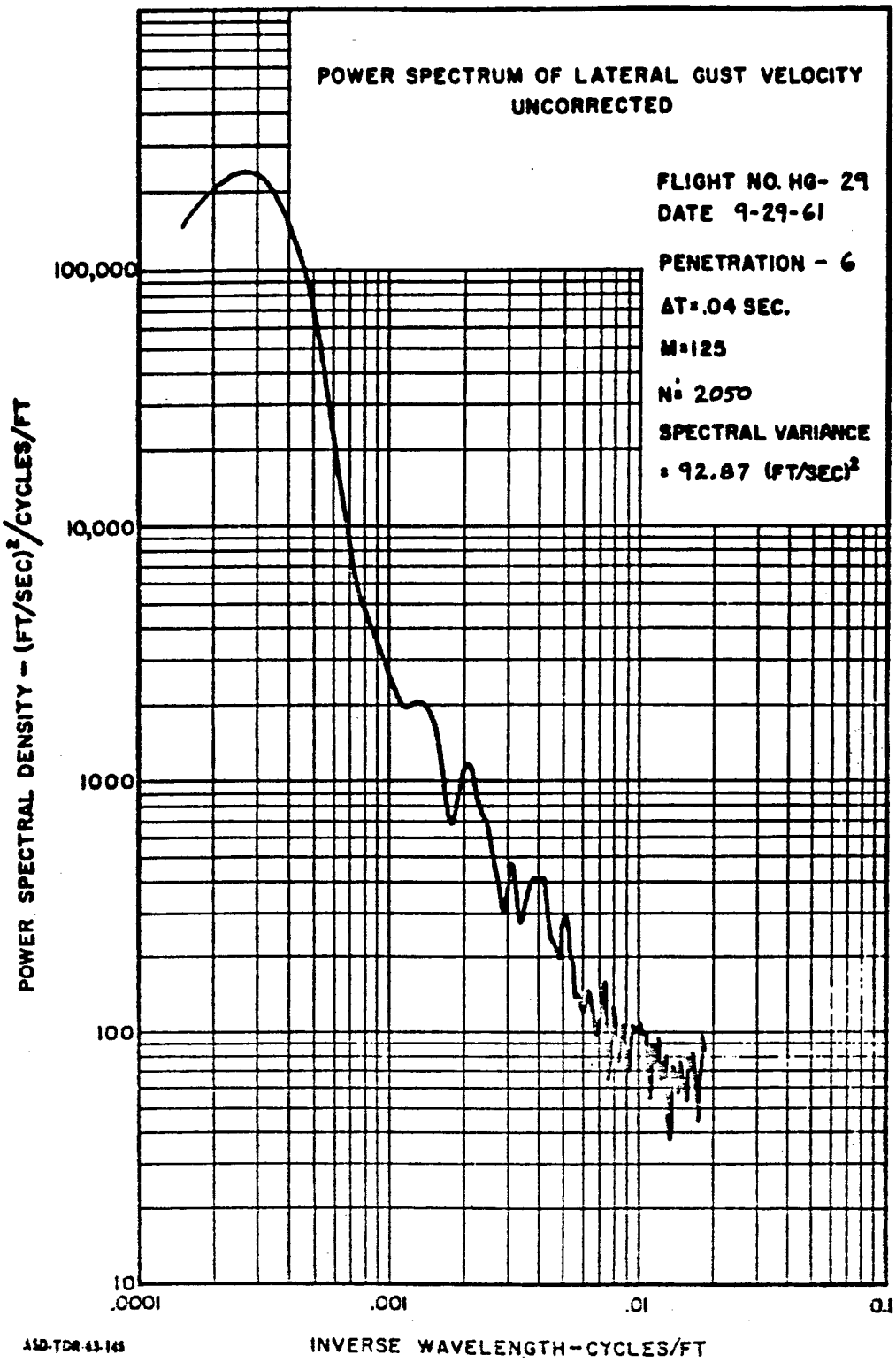


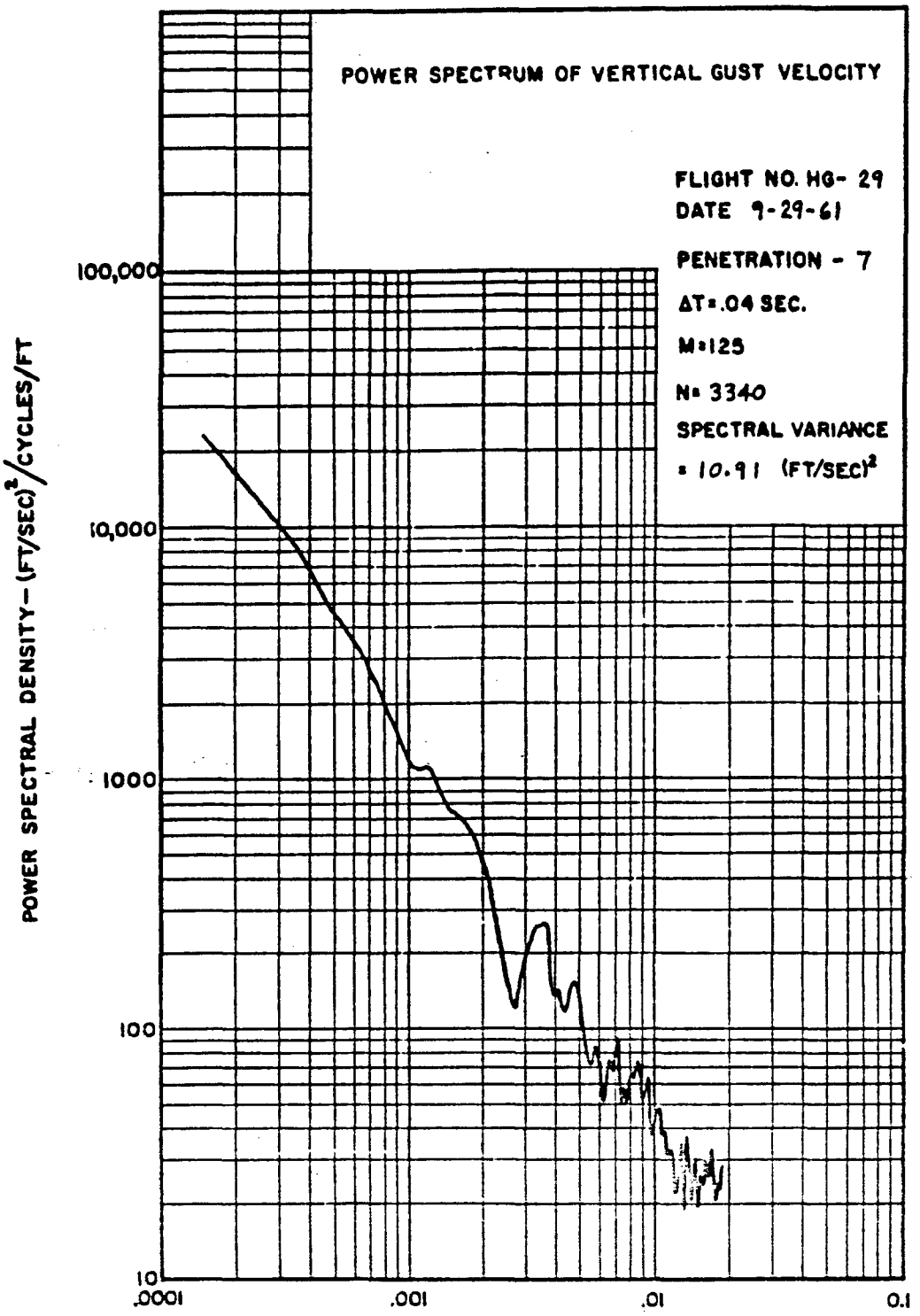
ASD-TDR-63-145
YDL-Line 11

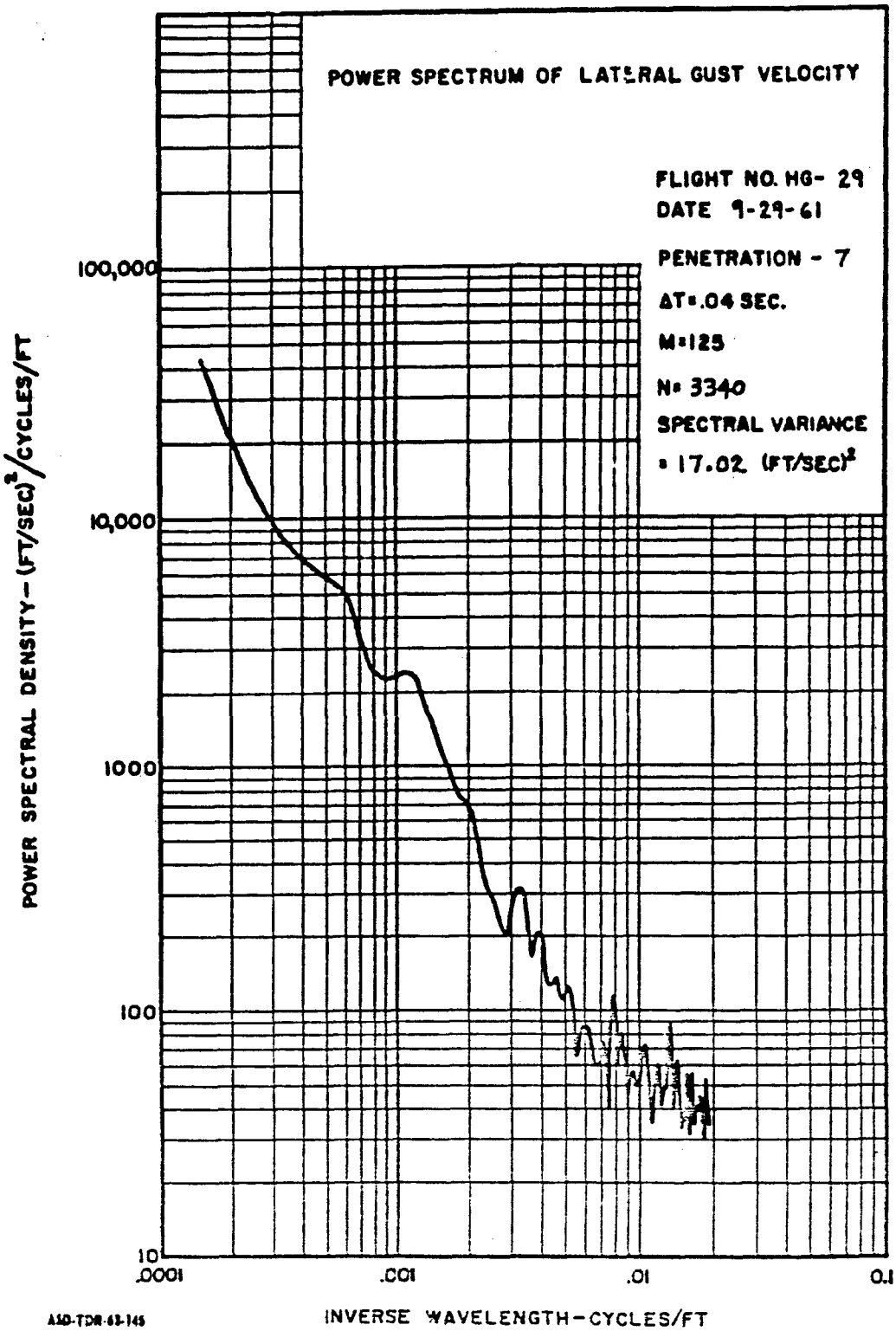

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2050
SPECTRAL VARIANCE
= 27.88 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

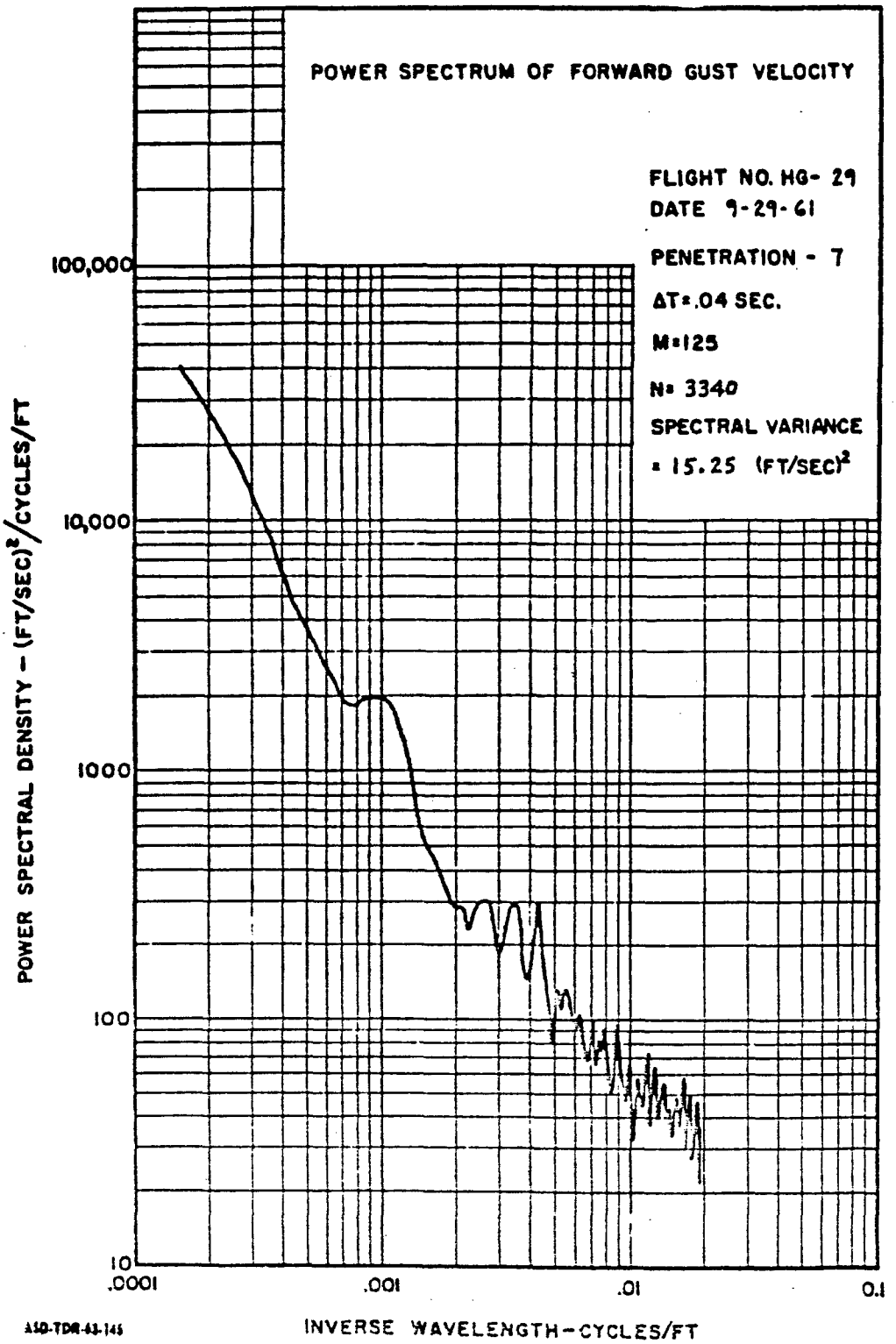

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2050
SPECTRAL VARIANCE
= 18.71 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

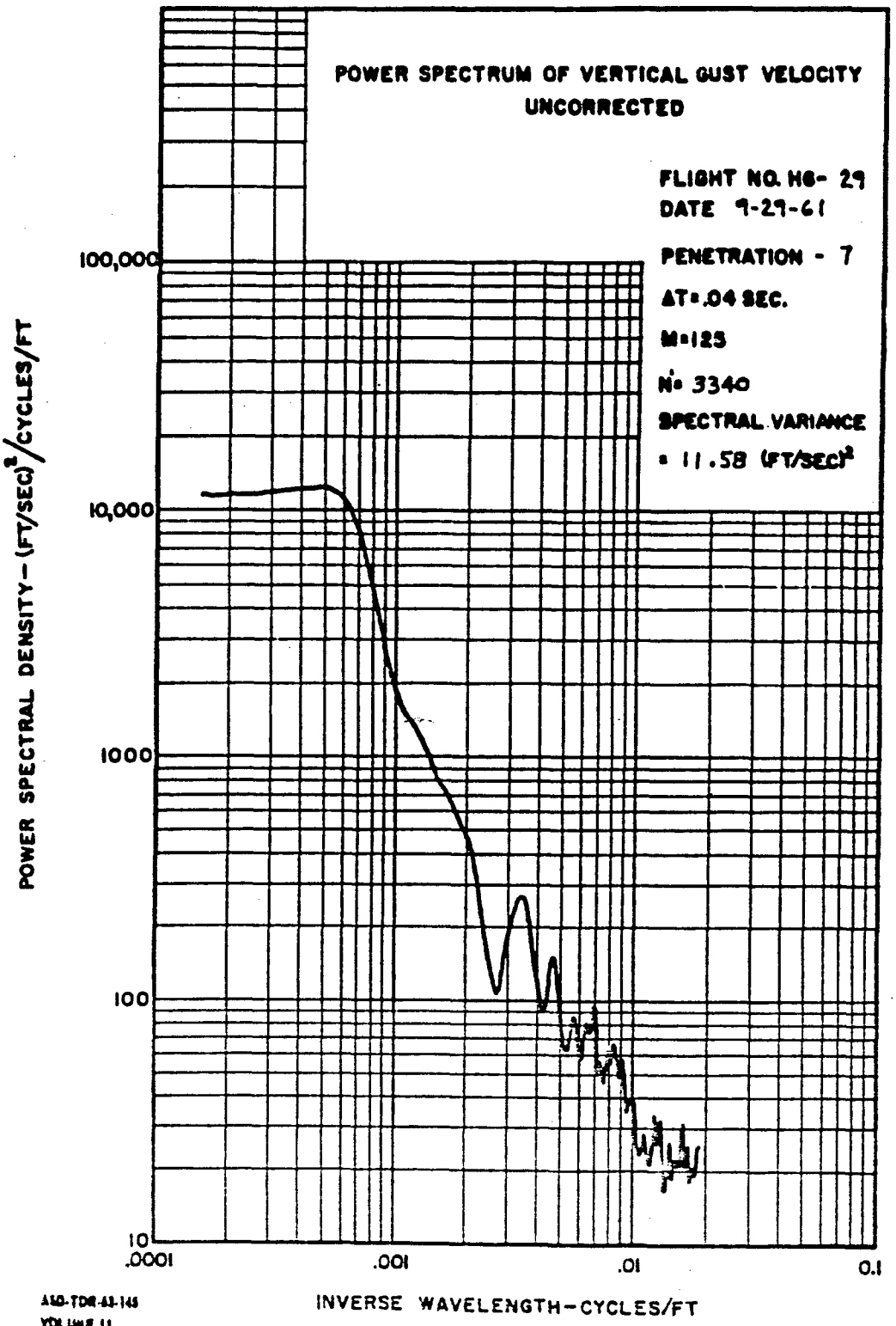

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2050
SPECTRAL VARIANCE
= 20.24 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

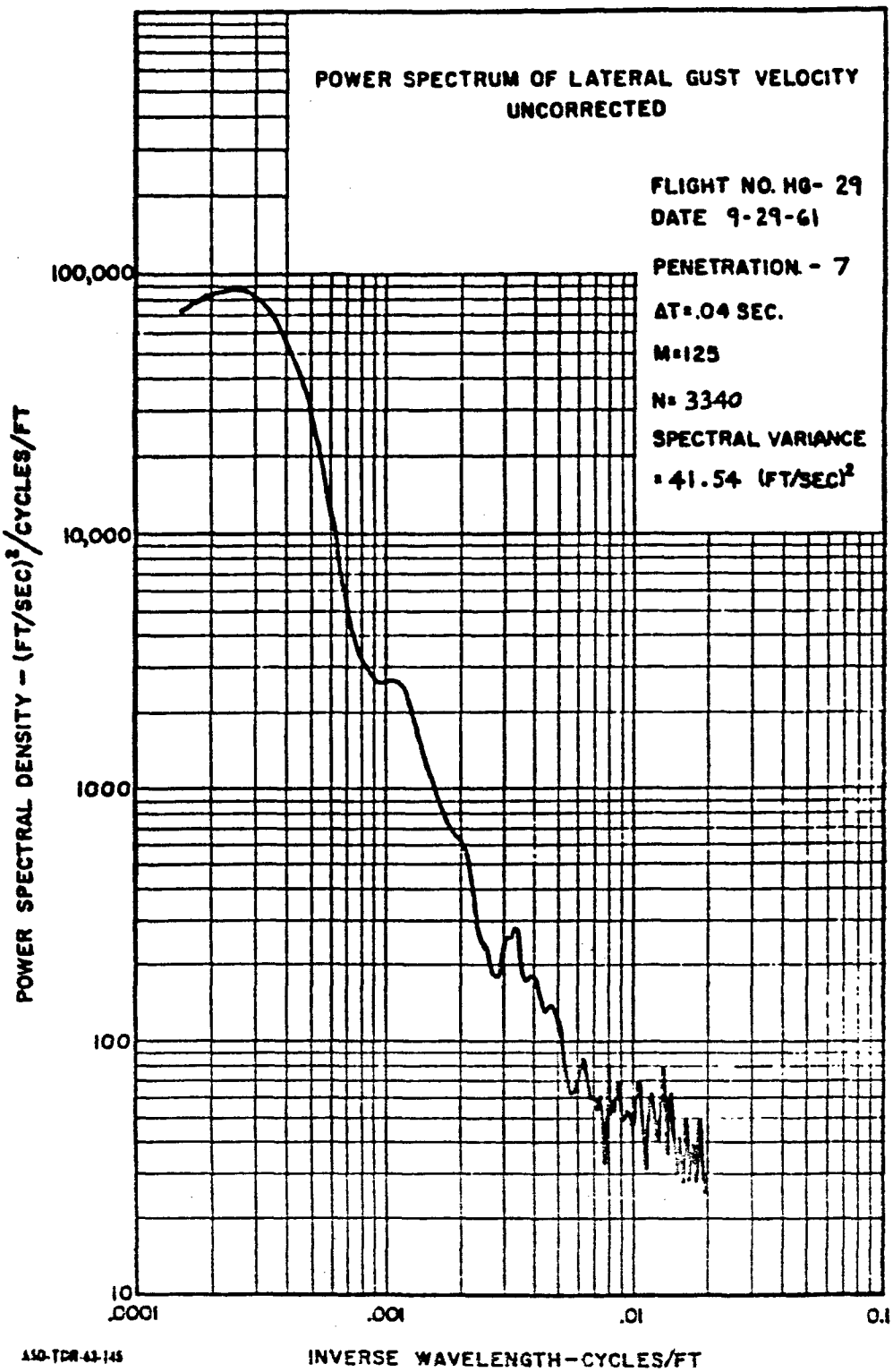

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2050
SPECTRAL VARIANCE
= 92.87 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

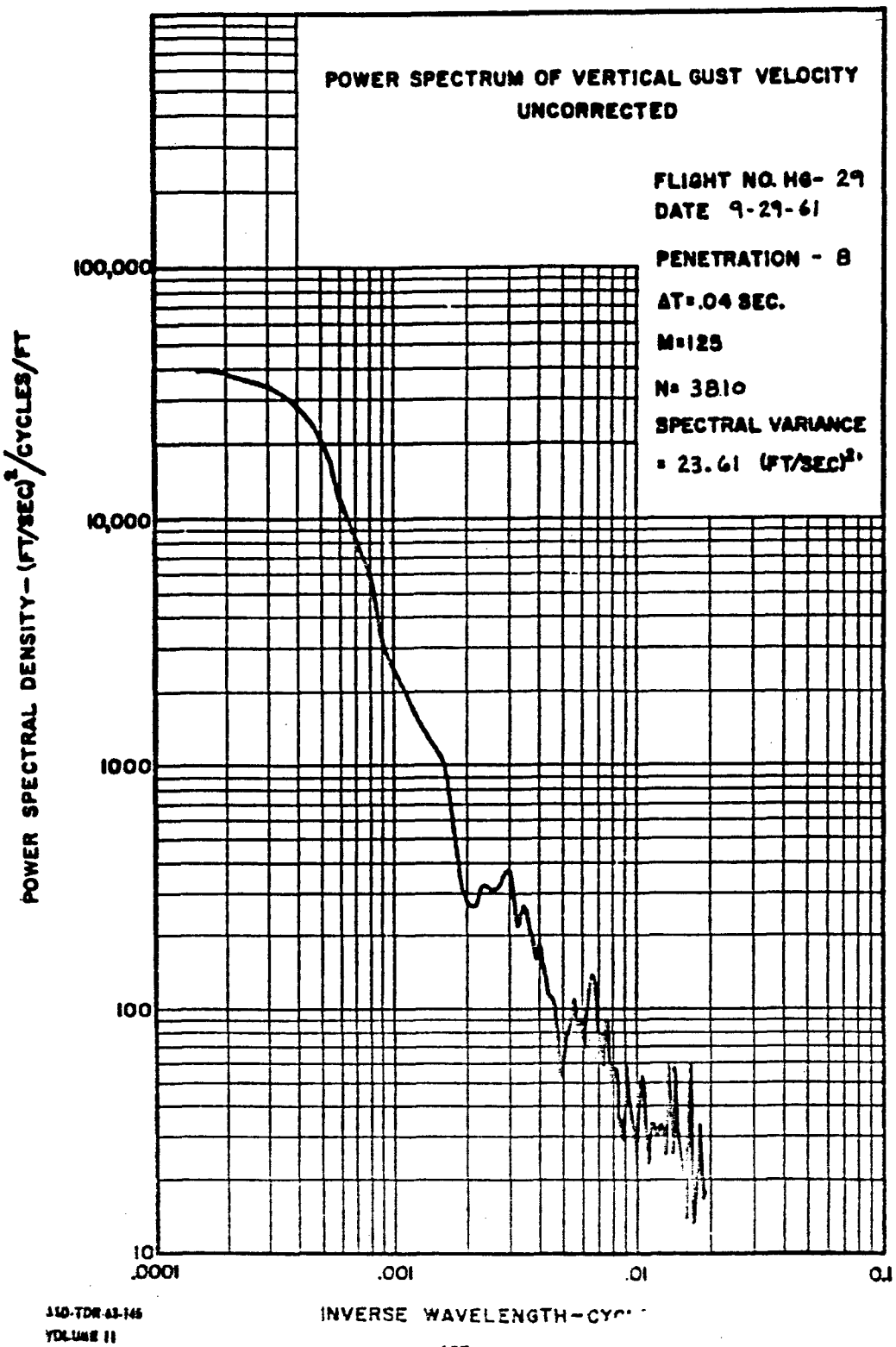

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3340
SPECTRAL VARIANCE
= 10.91 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

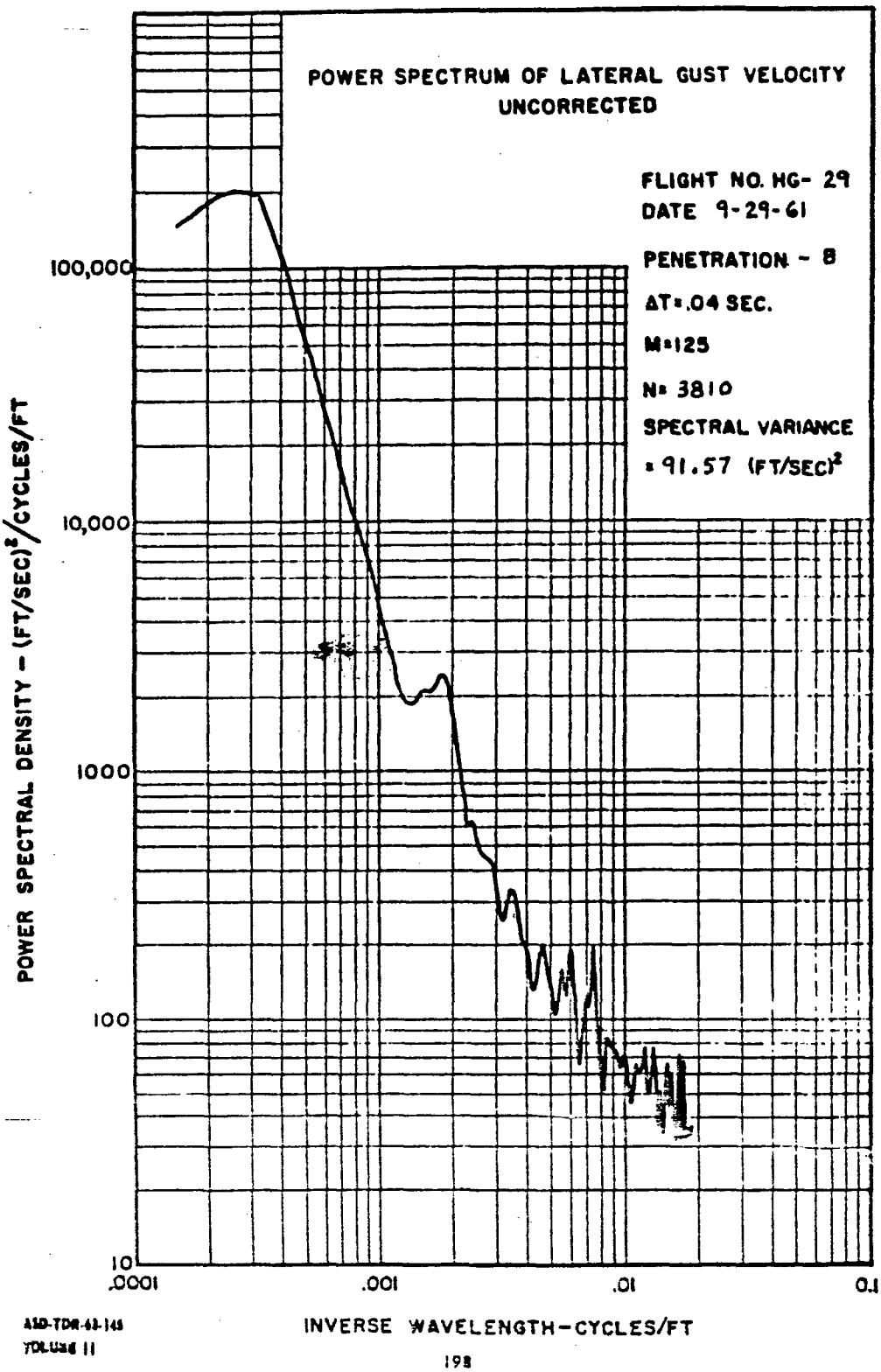

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3340
SPECTRAL VARIANCE
= 17.02 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

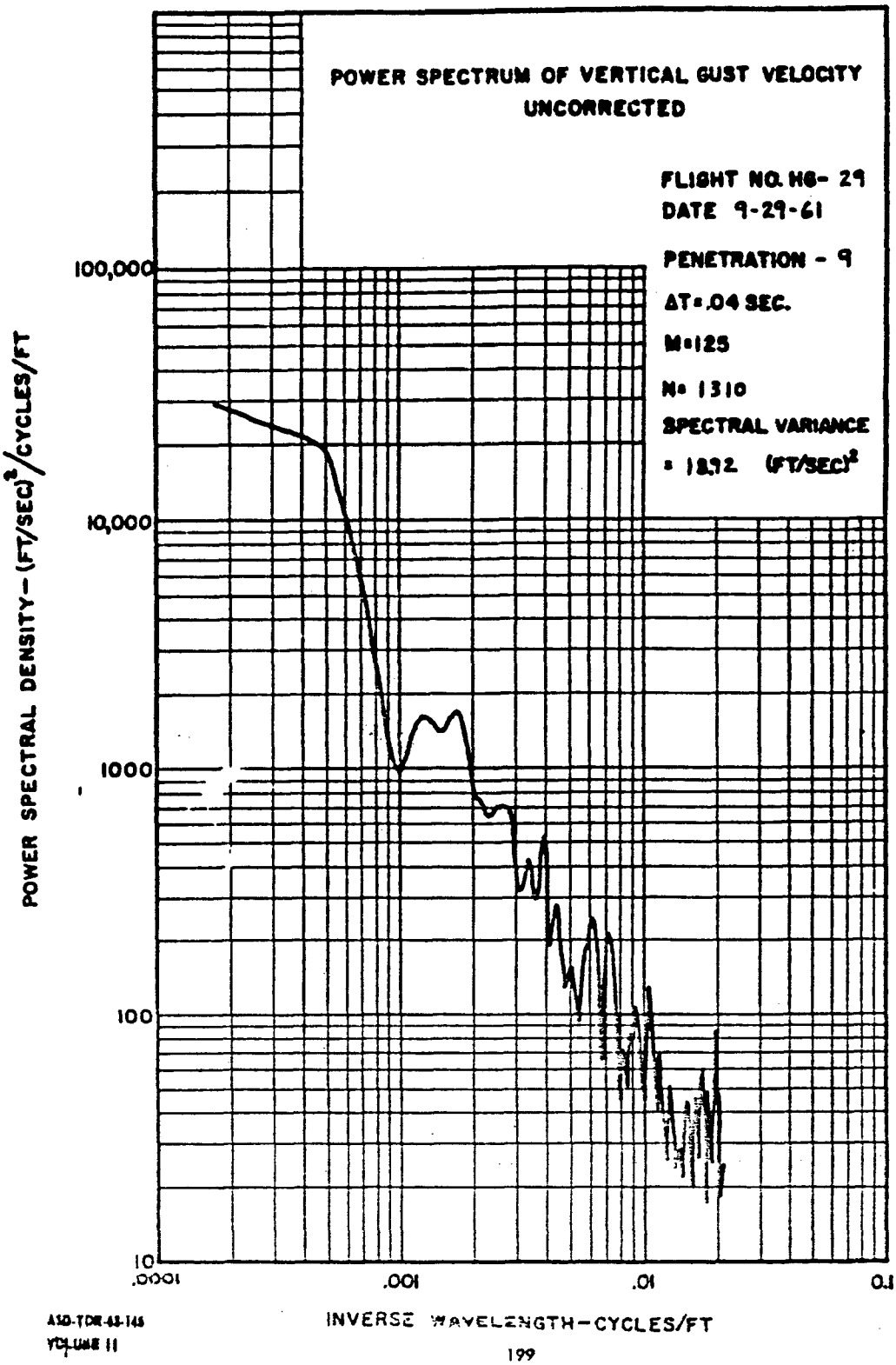

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3340
SPECTRAL VARIANCE
= 15.25 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

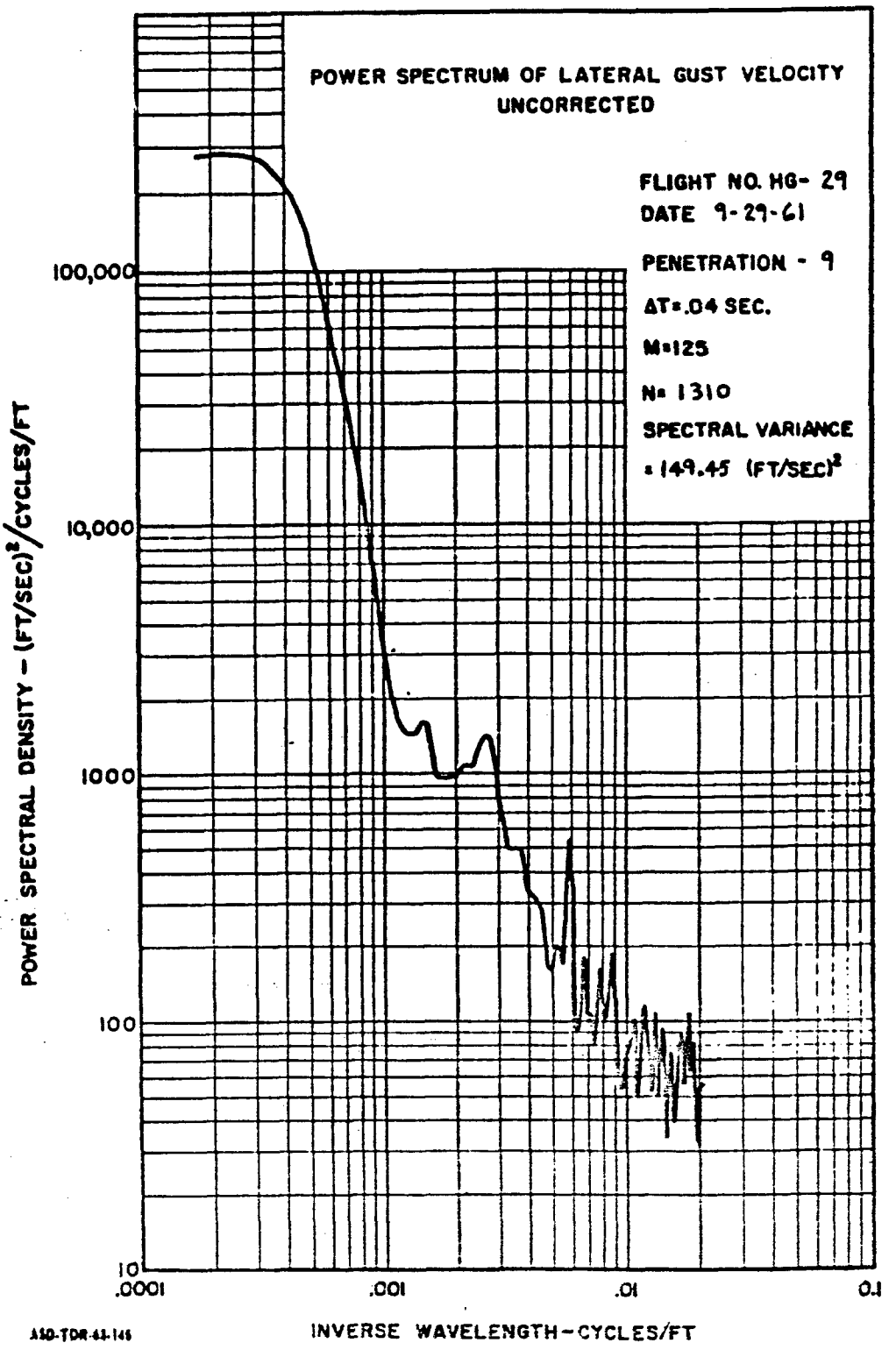

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 29
DATE 9-29-61
PENETRATION - 7
ΔT=.04 SEC.
M=1.25
N= 3340
SPECTRAL VARIANCE
= 11.58 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

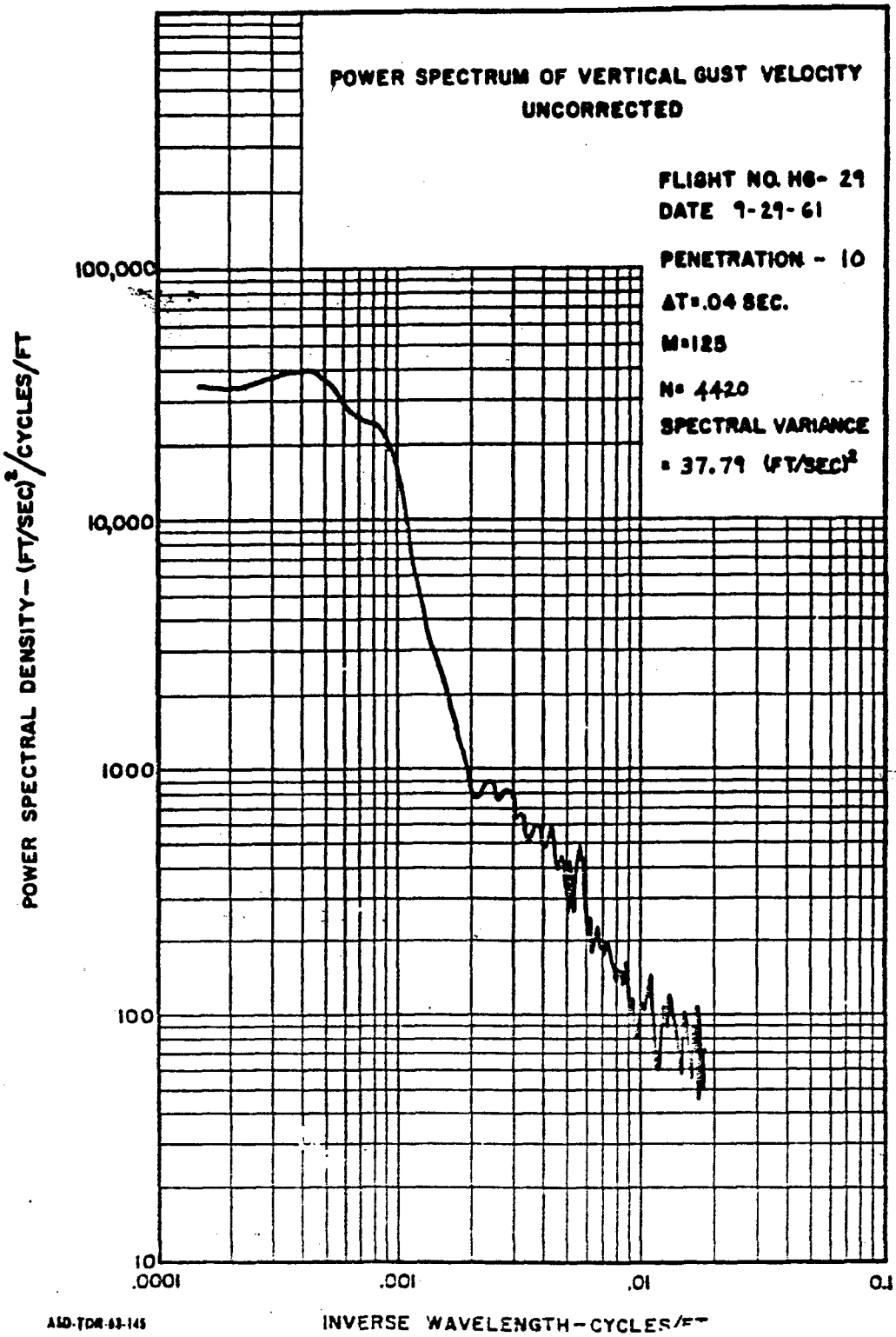

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3340
SPECTRAL VARIANCE
=41.54 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

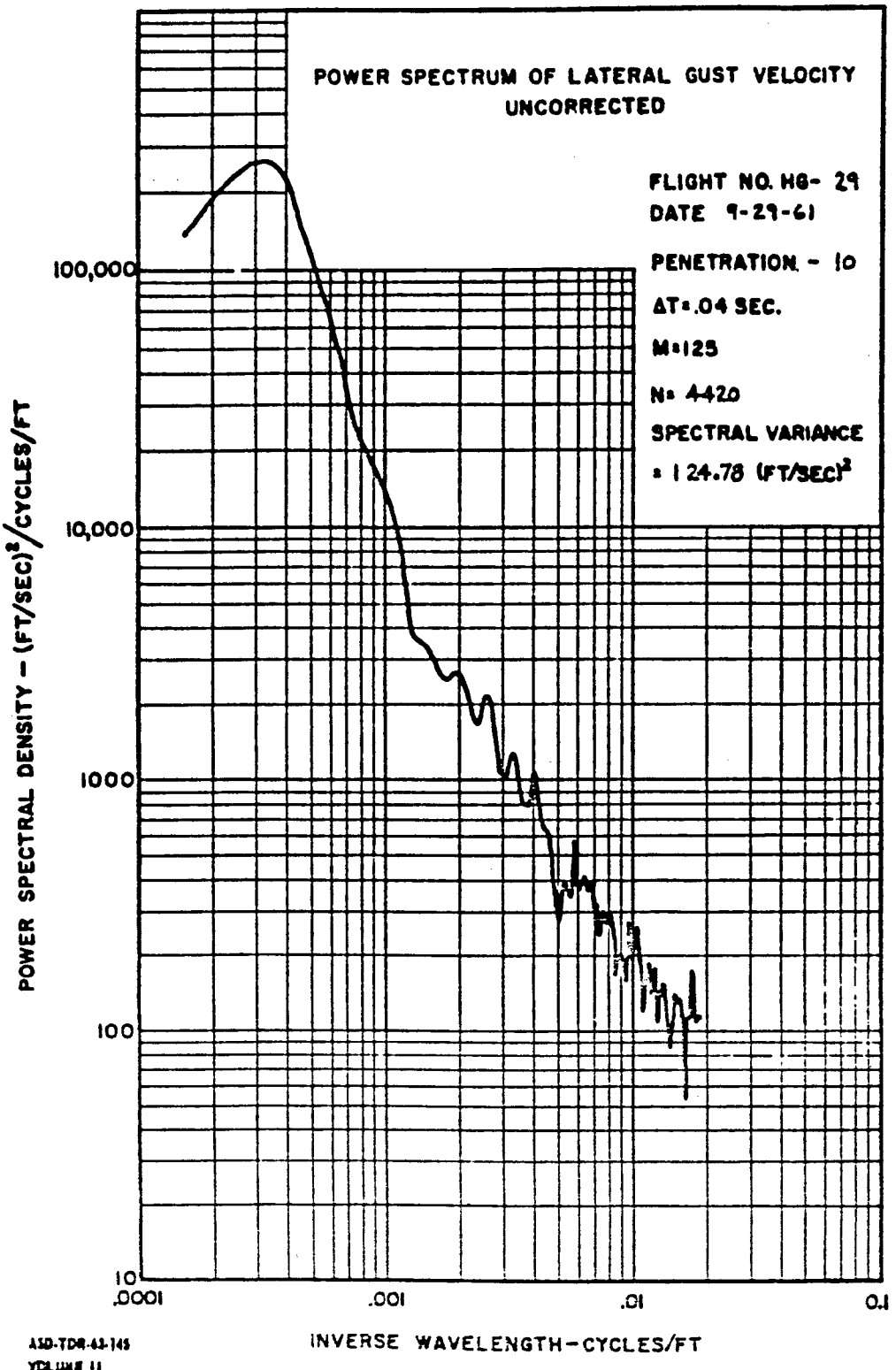

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 29
DATE 9-29-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 3810
SPECTRAL VARIANCE
= 23.61 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYC

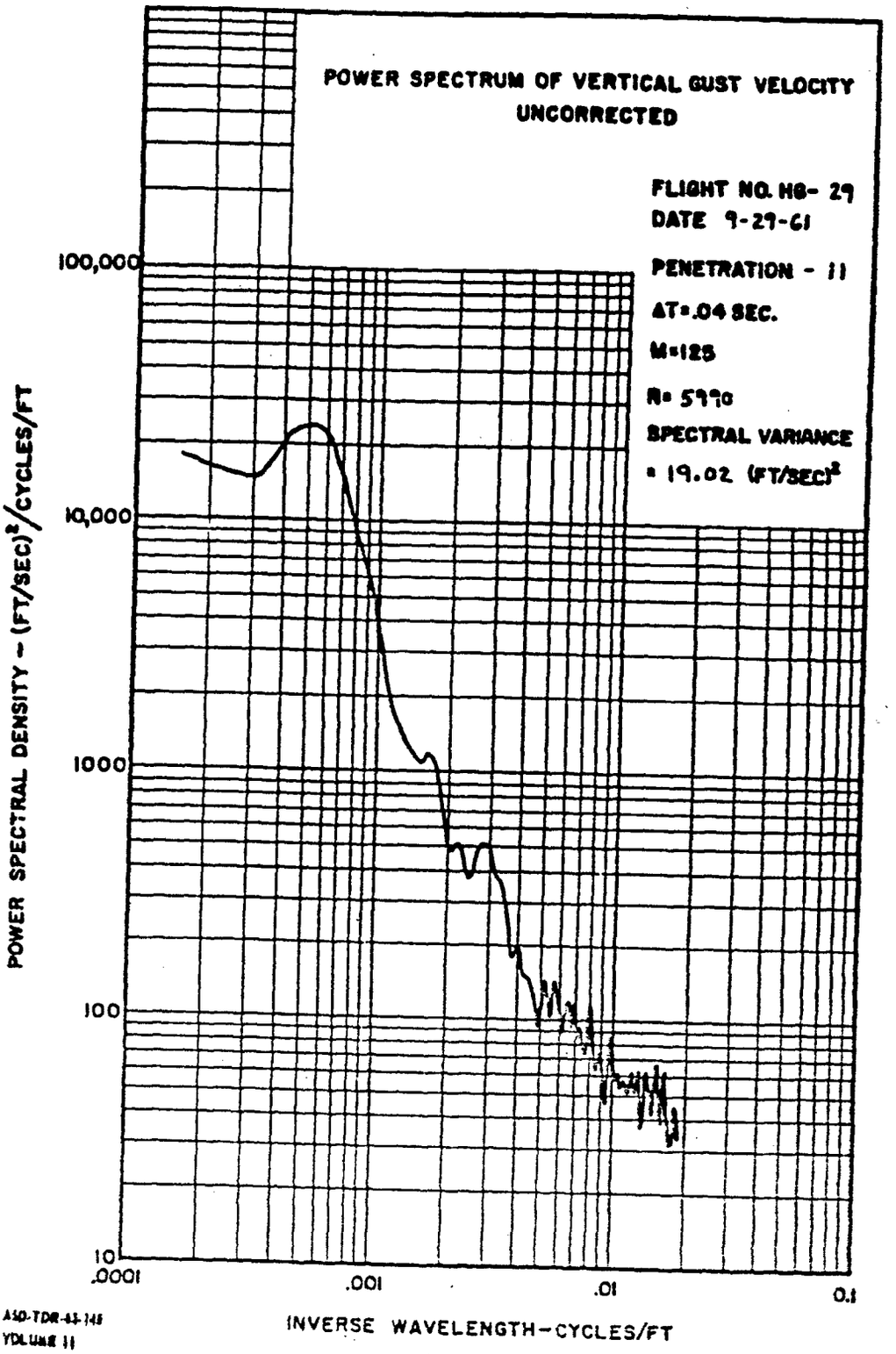

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 3810
SPECTRAL VARIANCE
= 91.57 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

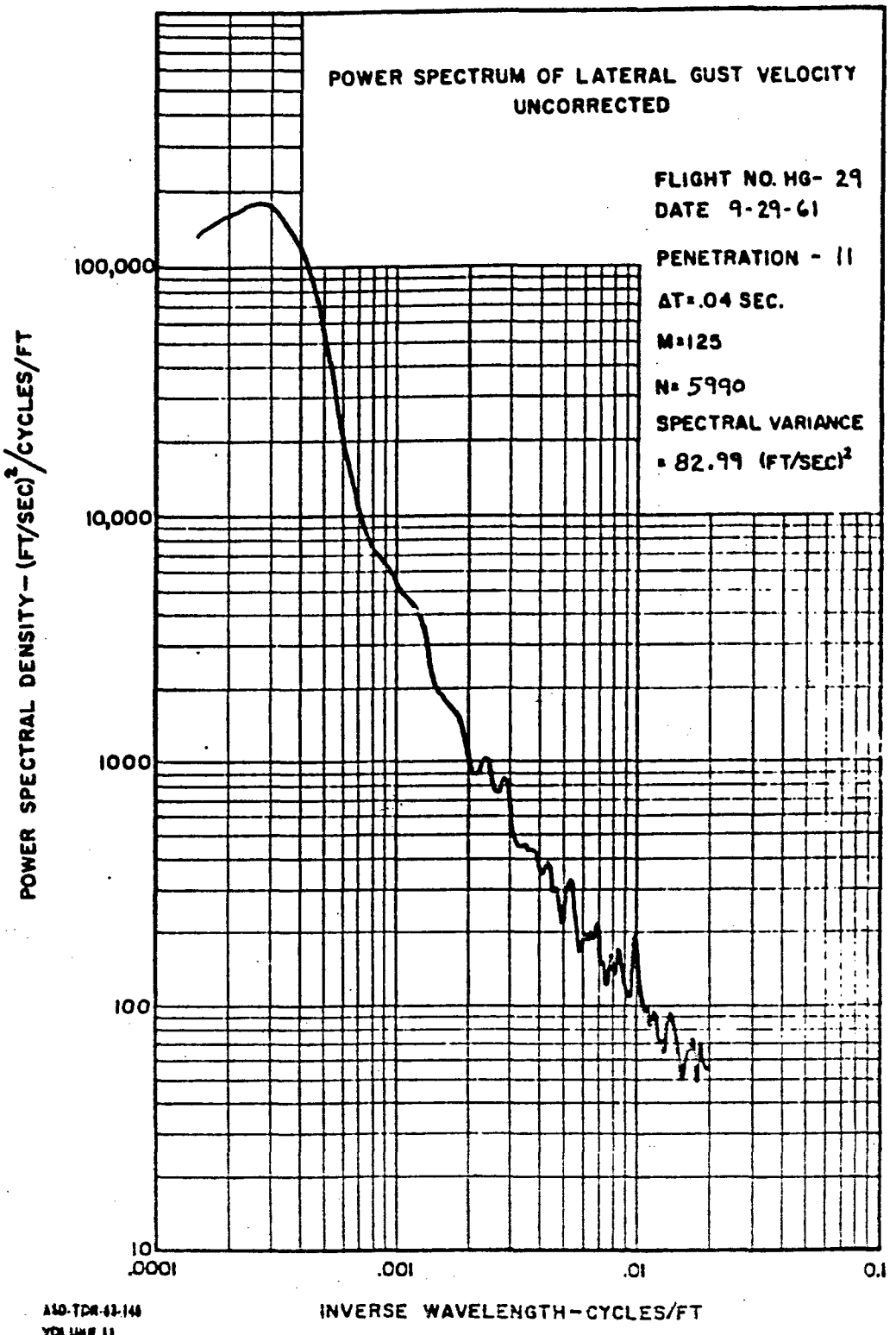

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 29
DATE 9-29-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1310
SPECTRAL VARIANCE
= 18.92 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

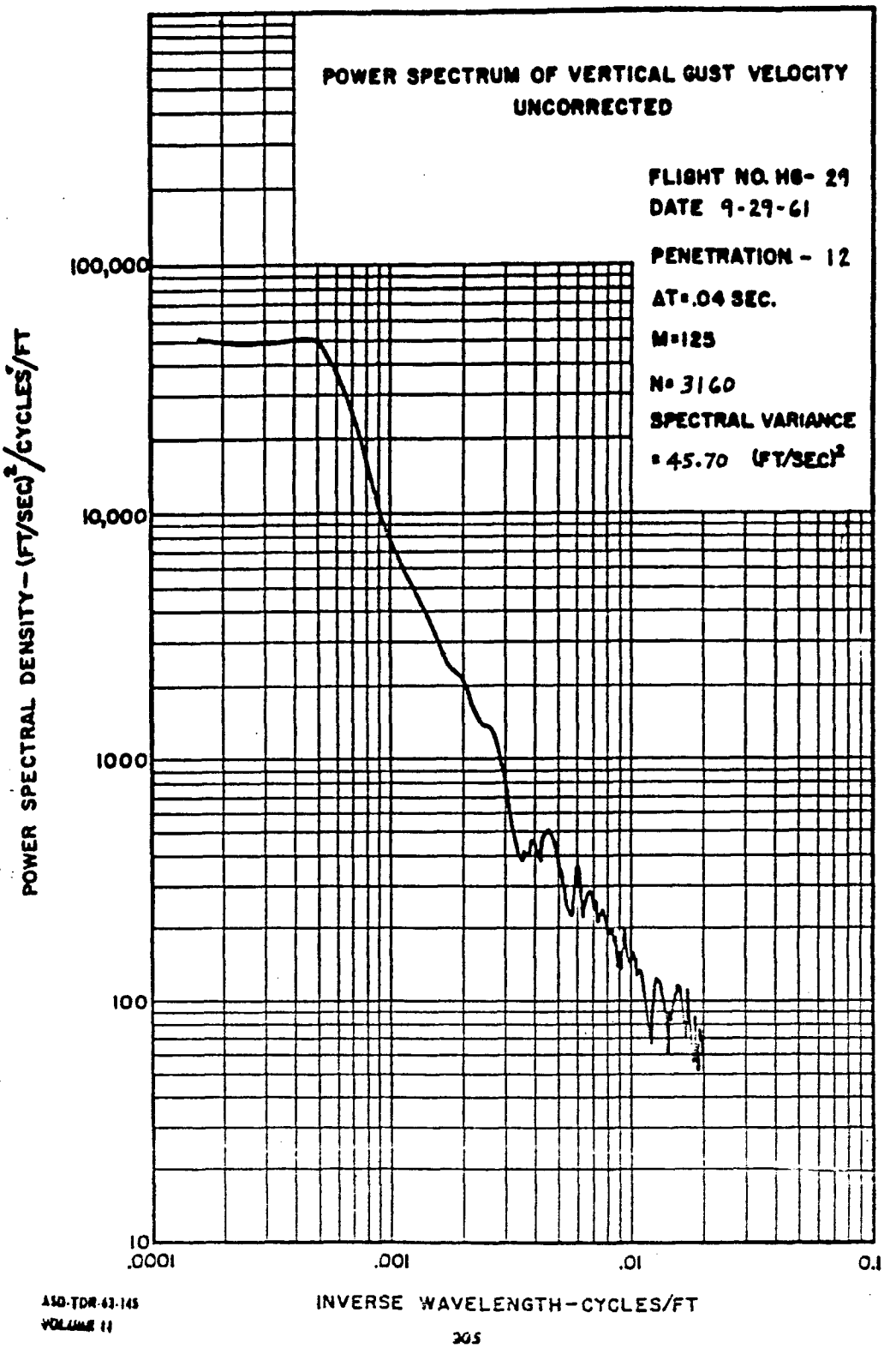

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1310
SPECTRAL VARIANCE
=149.45 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

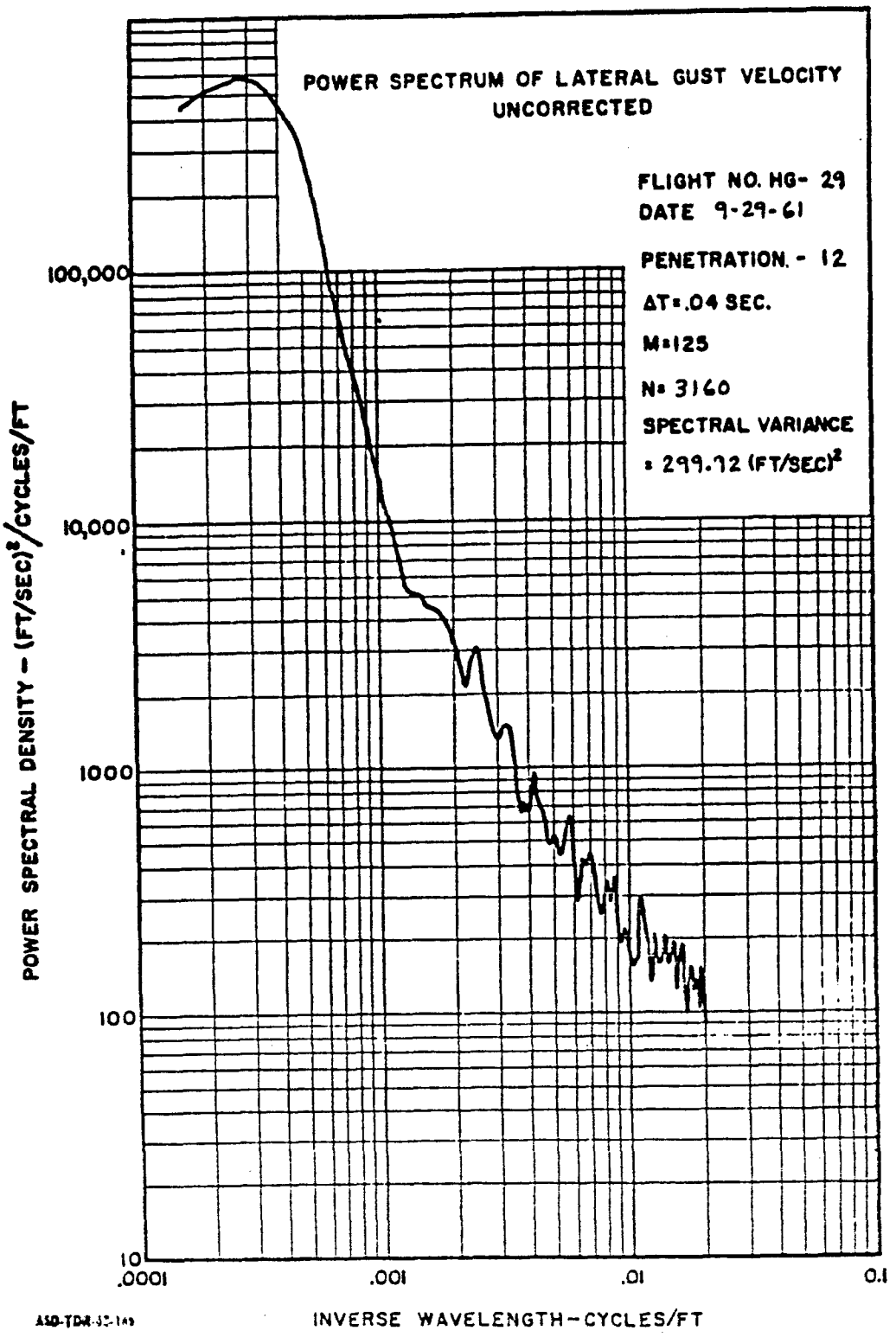

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 29
DATE 9-29-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 4420
SPECTRAL VARIANCE
= 37.79 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

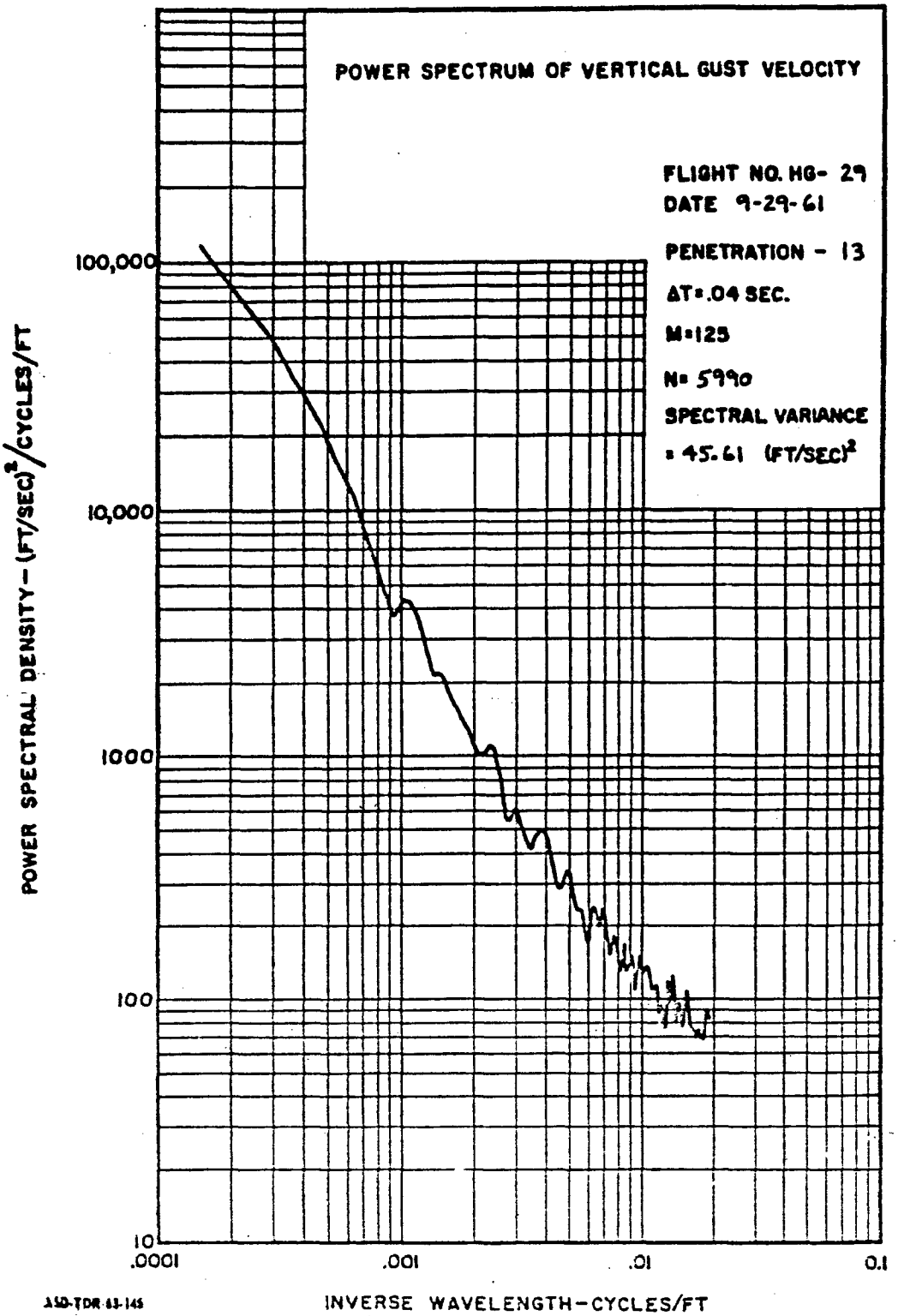

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 4420
SPECTRAL VARIANCE
= 124.78 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

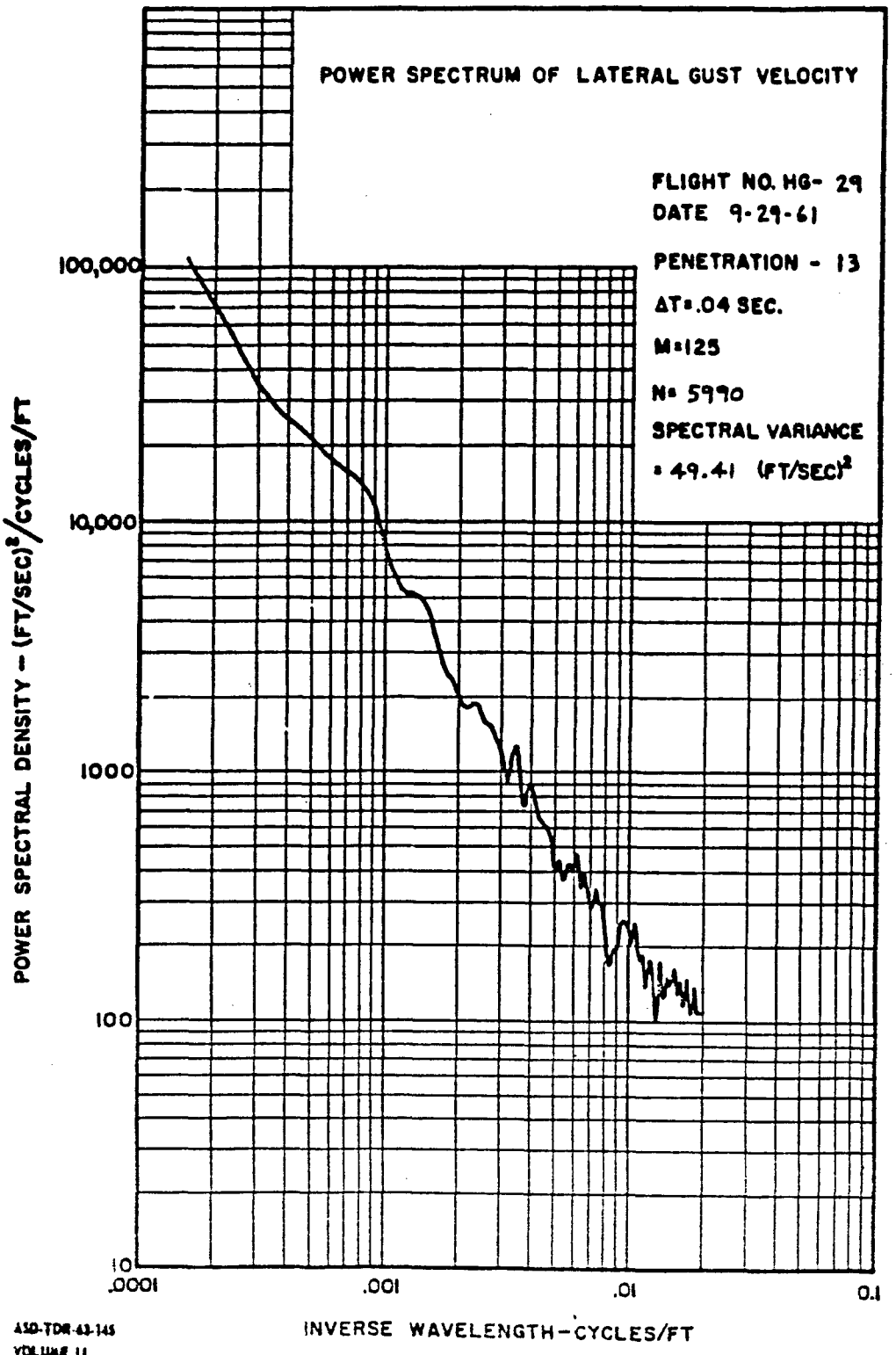

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H8- 29
DATE 9-29-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 19.02 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

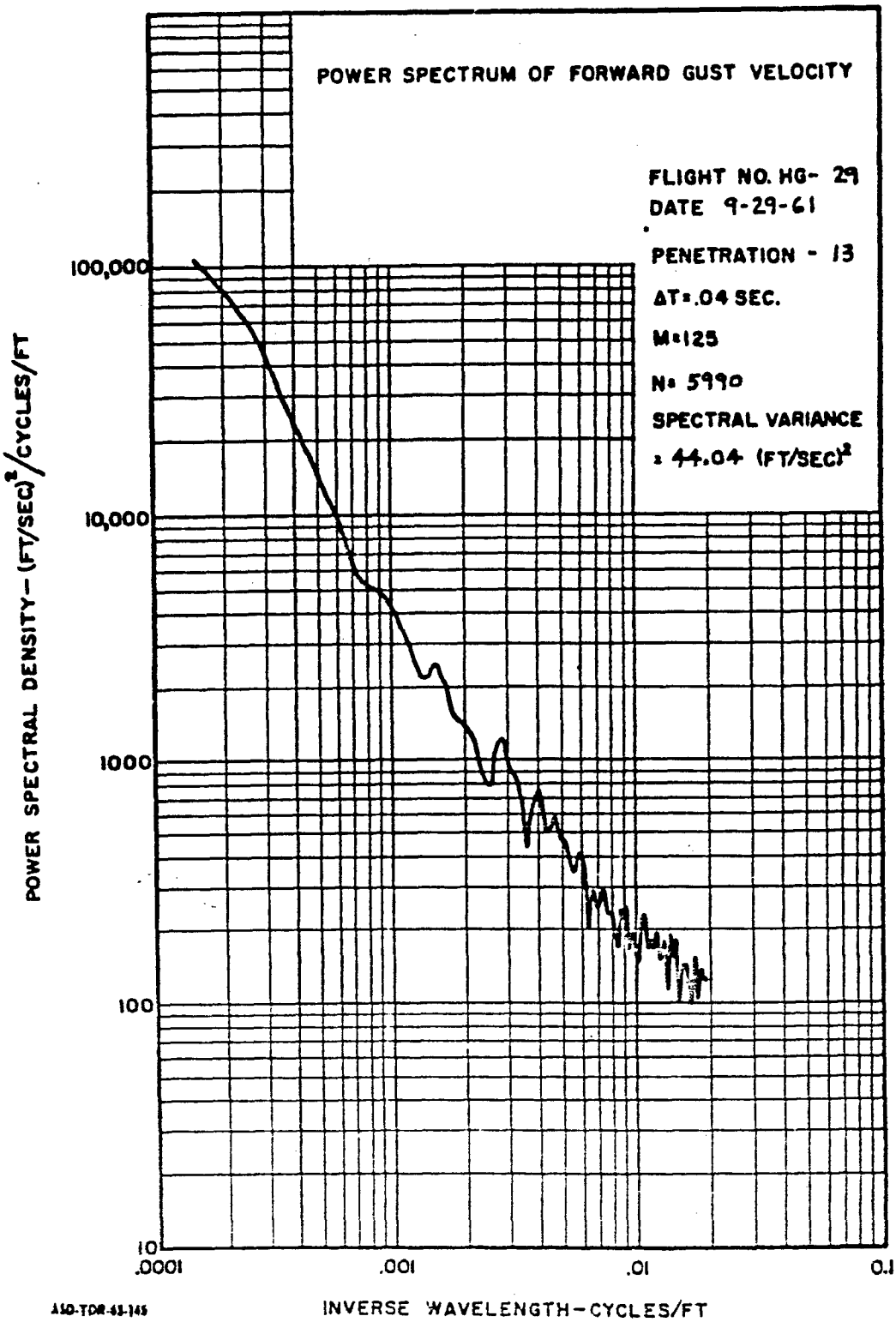

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 82.99 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

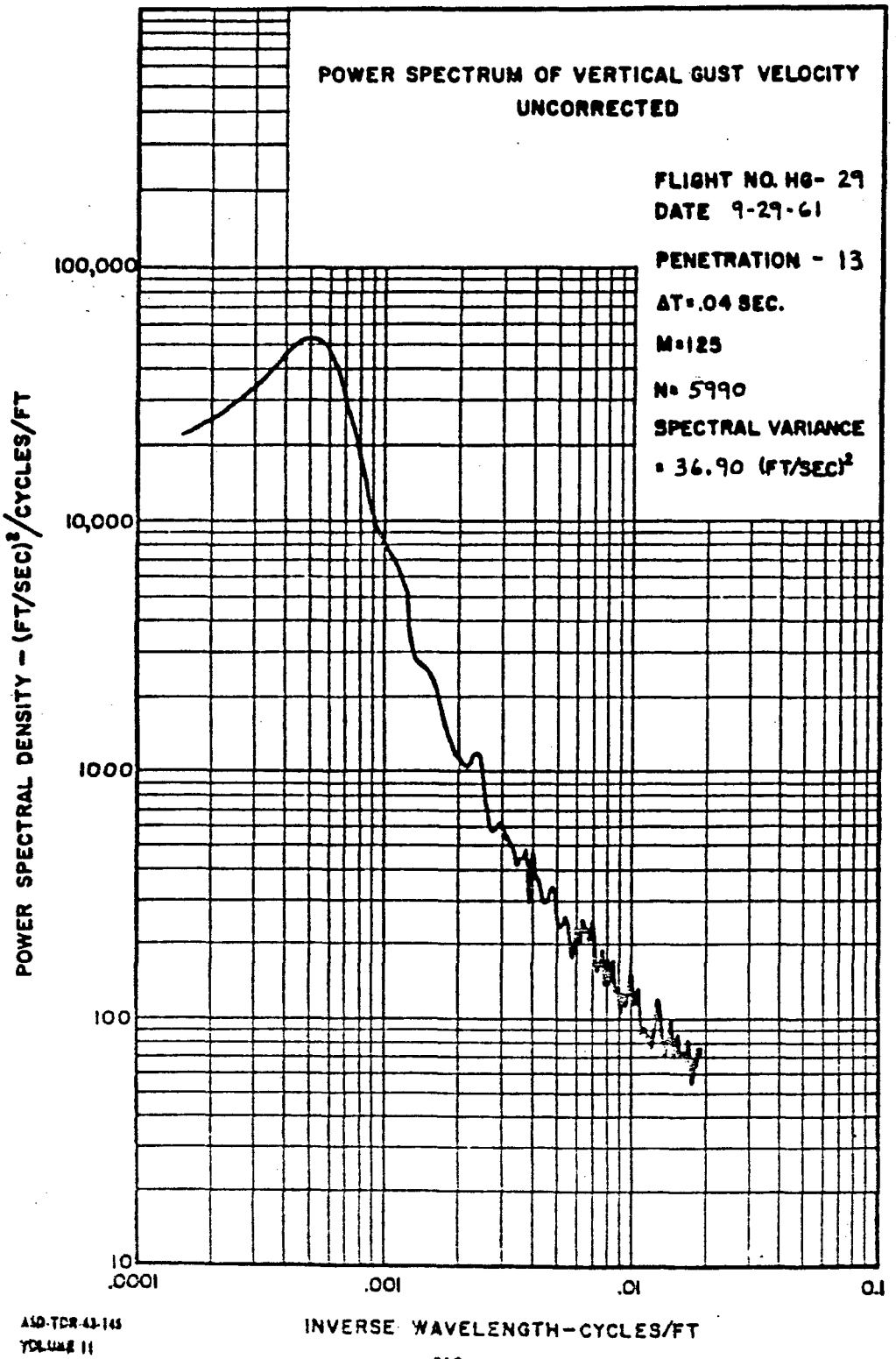

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H8- 29
DATE 9-29-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N=3160
SPECTRAL VARIANCE
=45.70 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

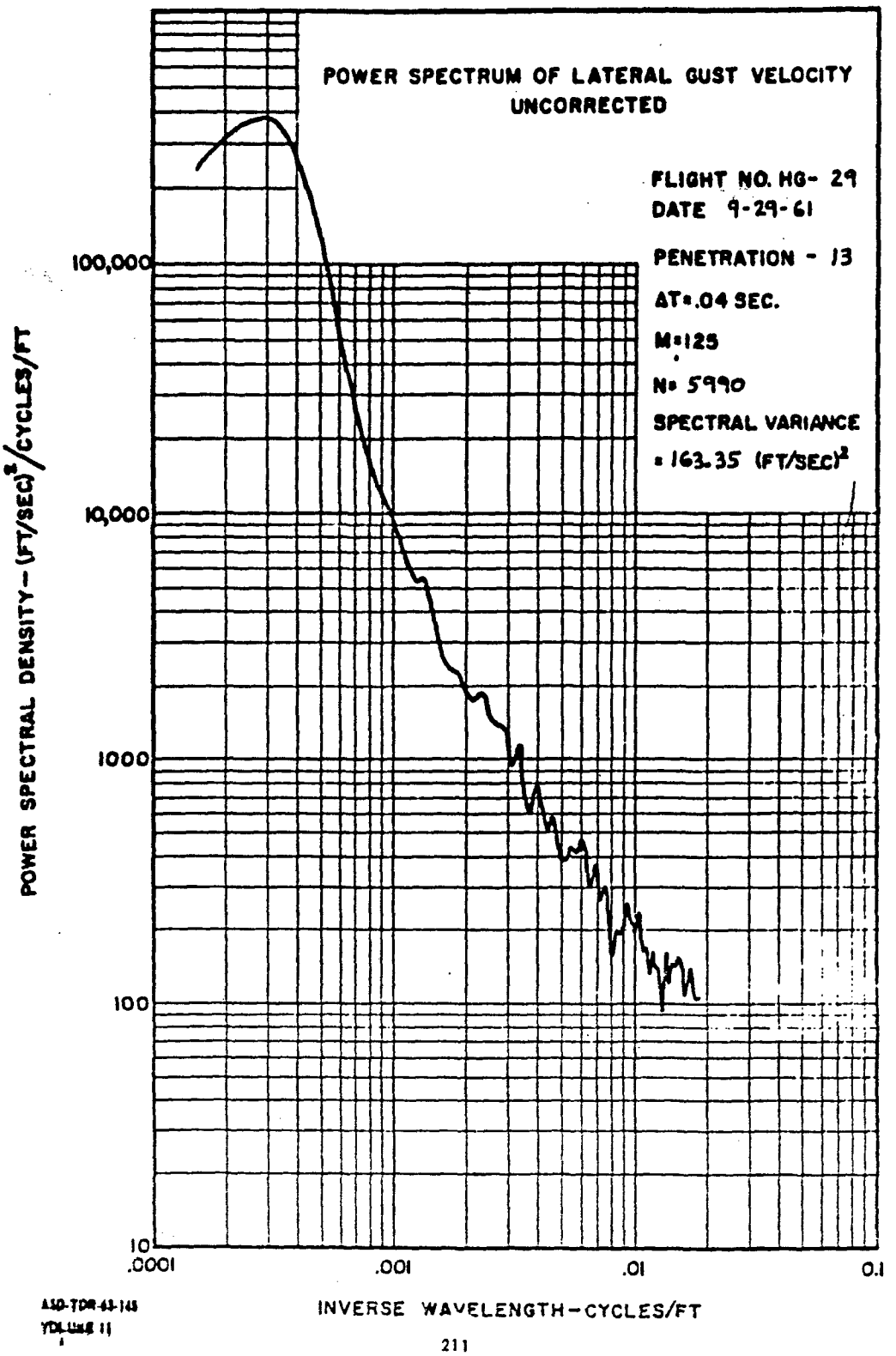

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION. - 12
ΔT=.04 SEC.
M=125
N= 3160
SPECTRAL VARIANCE
= 299.12 (FT/SEC)²
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH–CYCLES/FT


POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 45.61 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

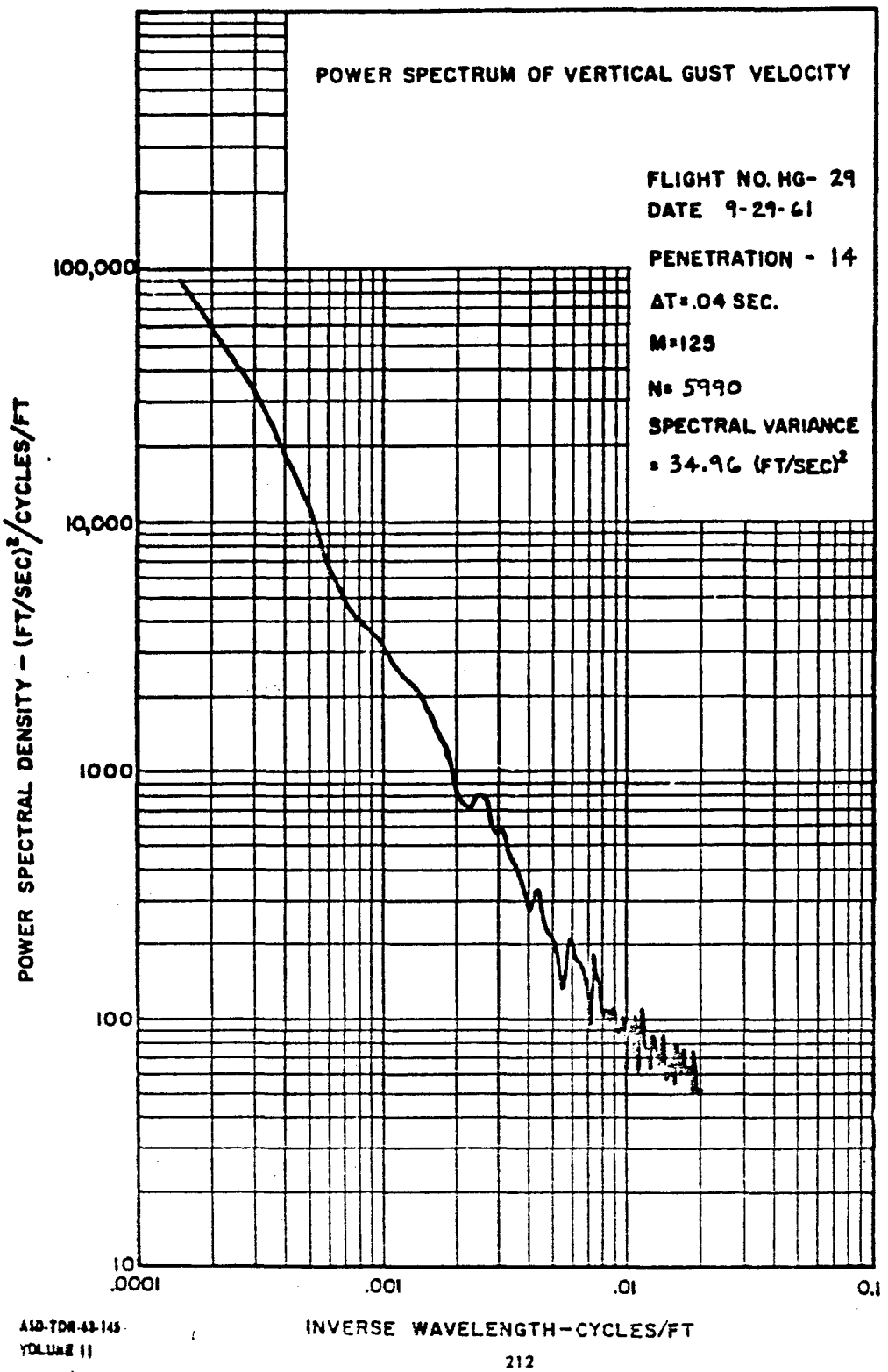

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 49.41 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

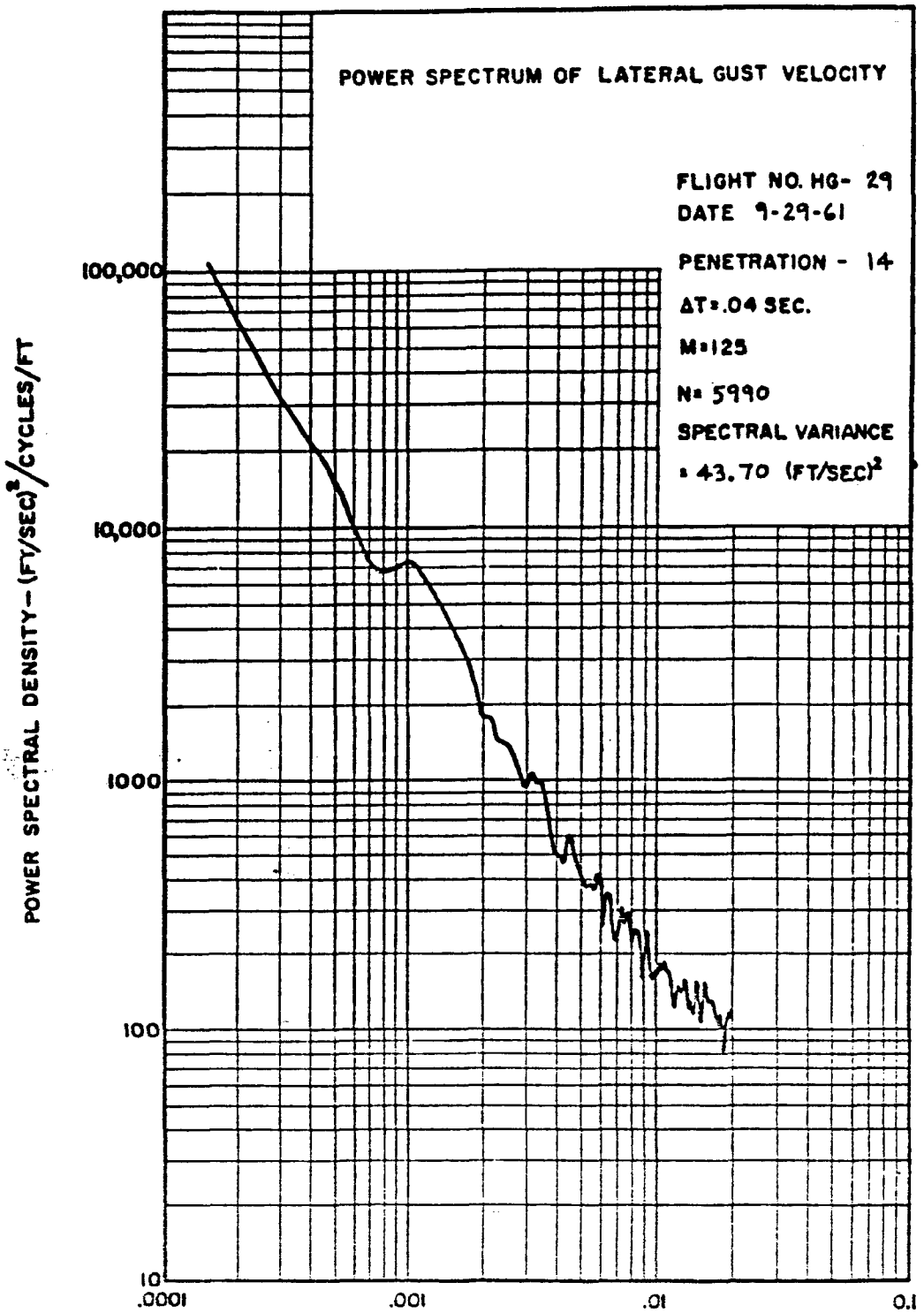

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 44.04 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

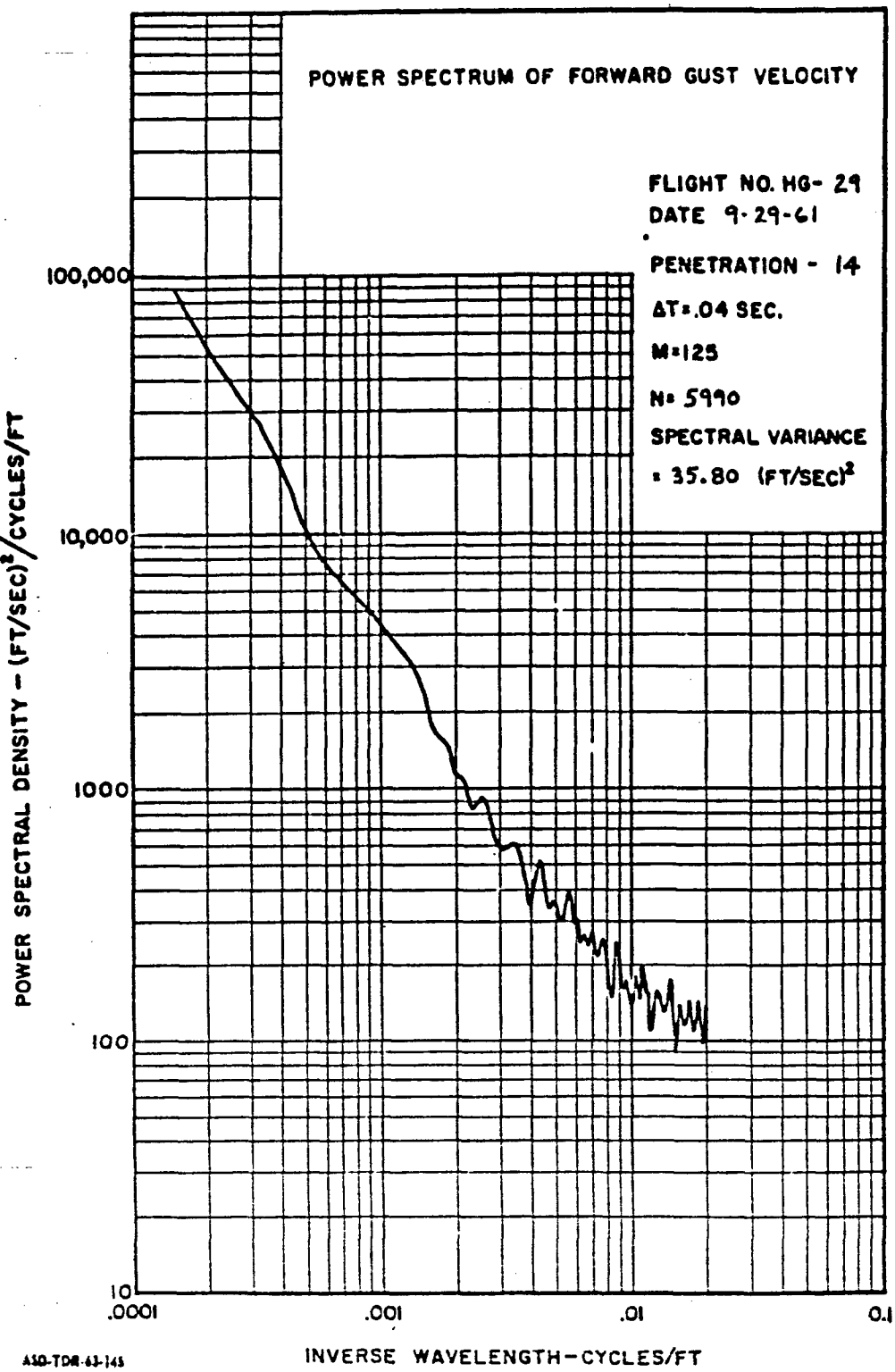

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 36.90 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

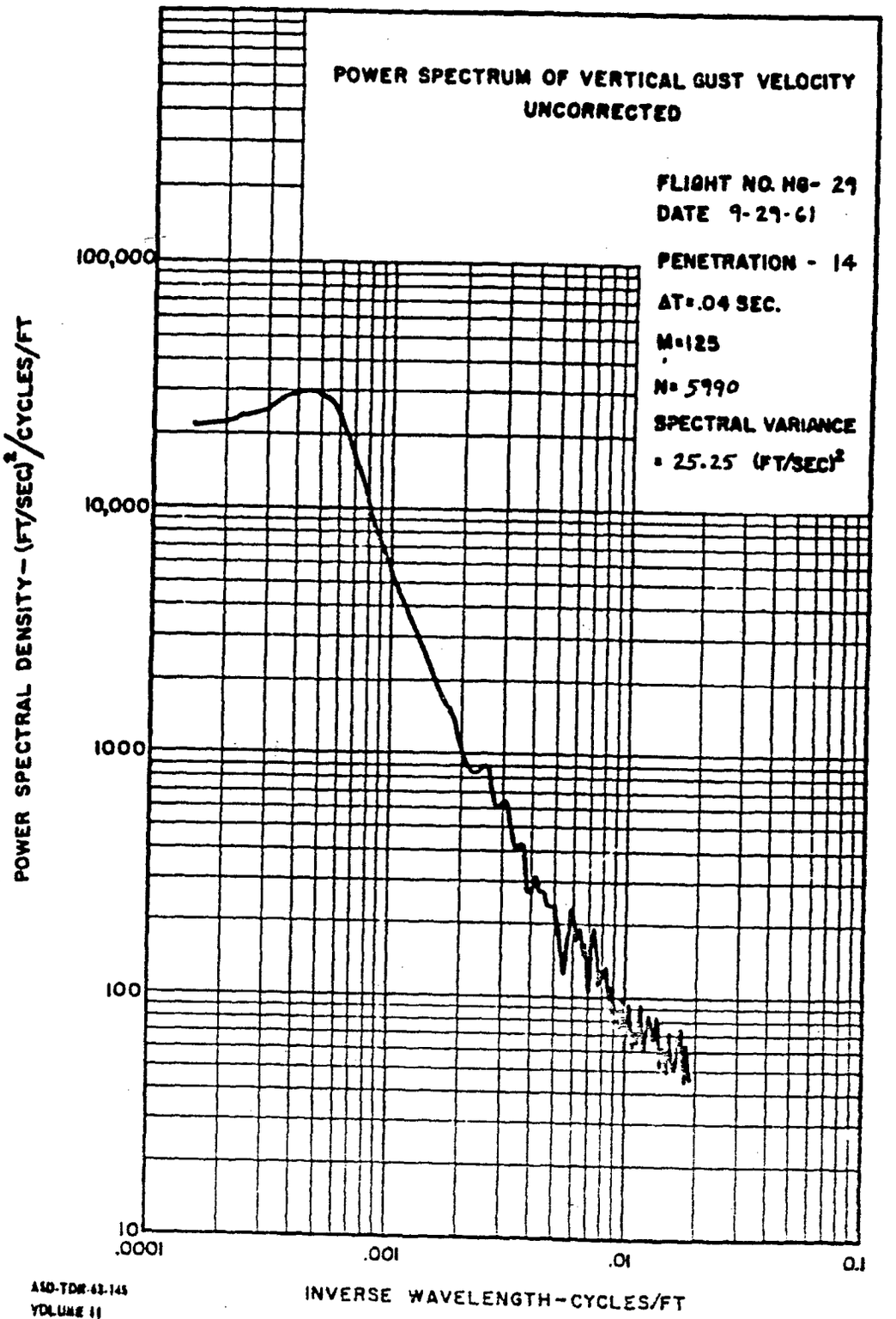


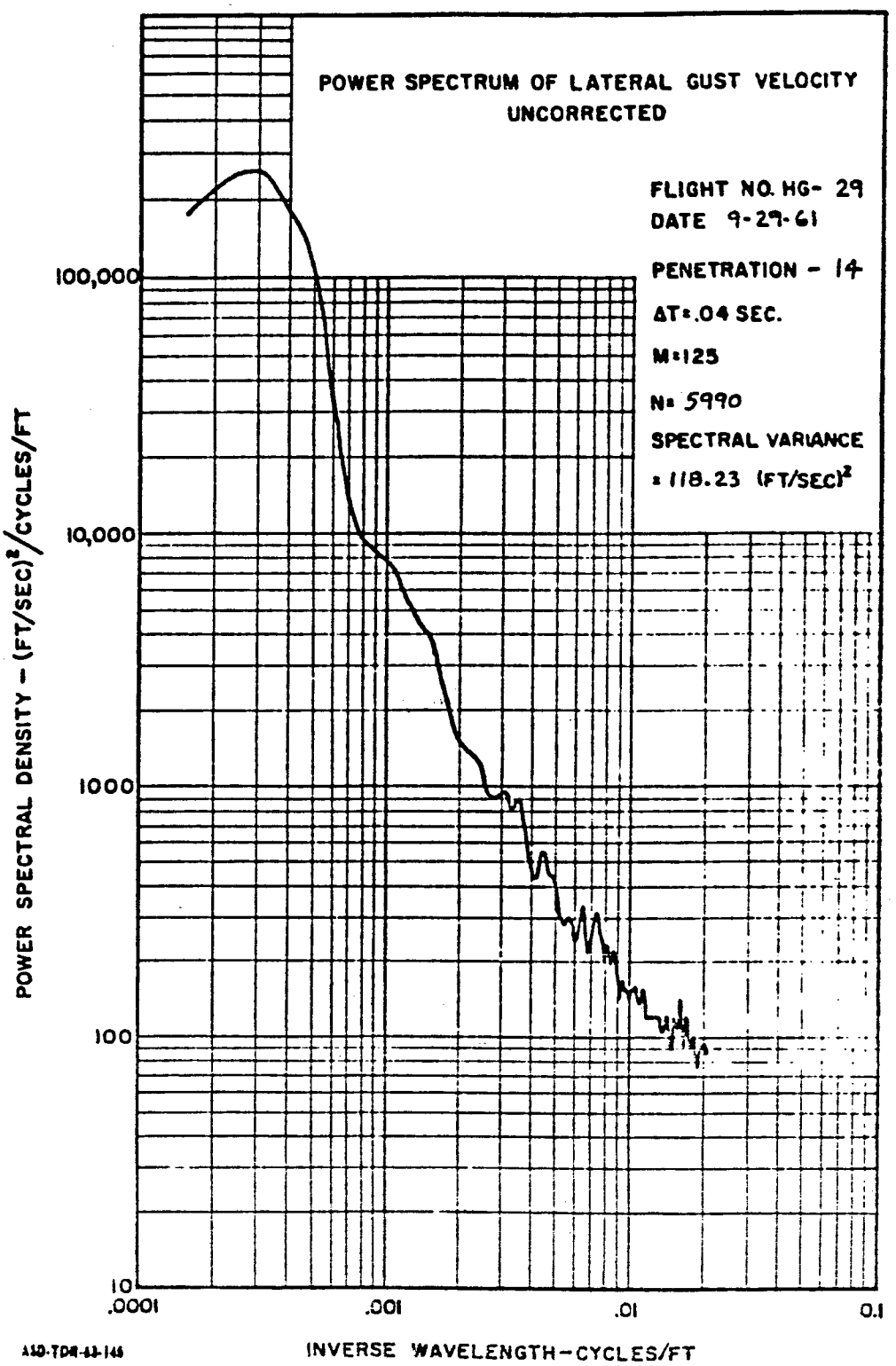
ASD-TDR-63-143
YDL-Unit II

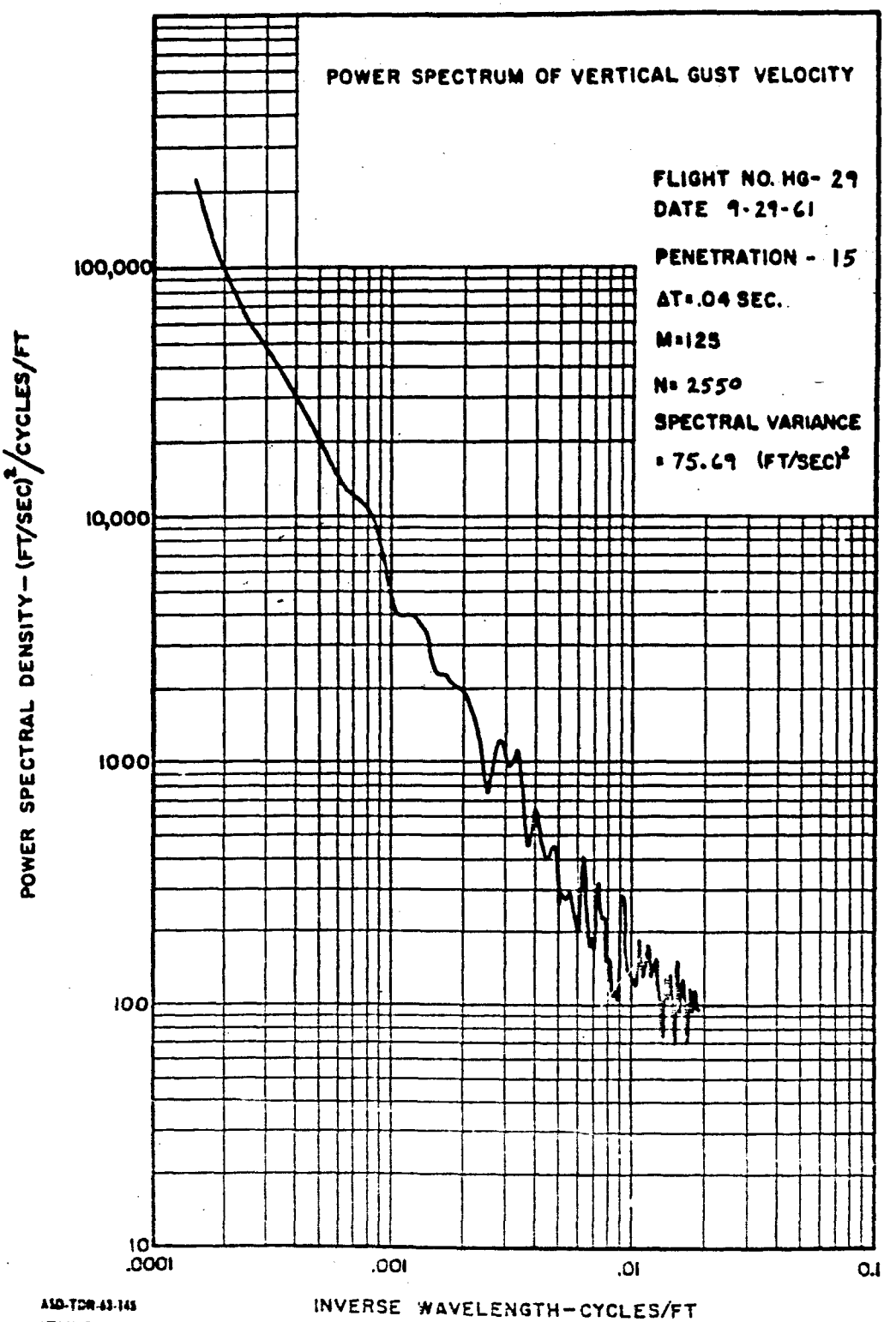

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 34.96 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

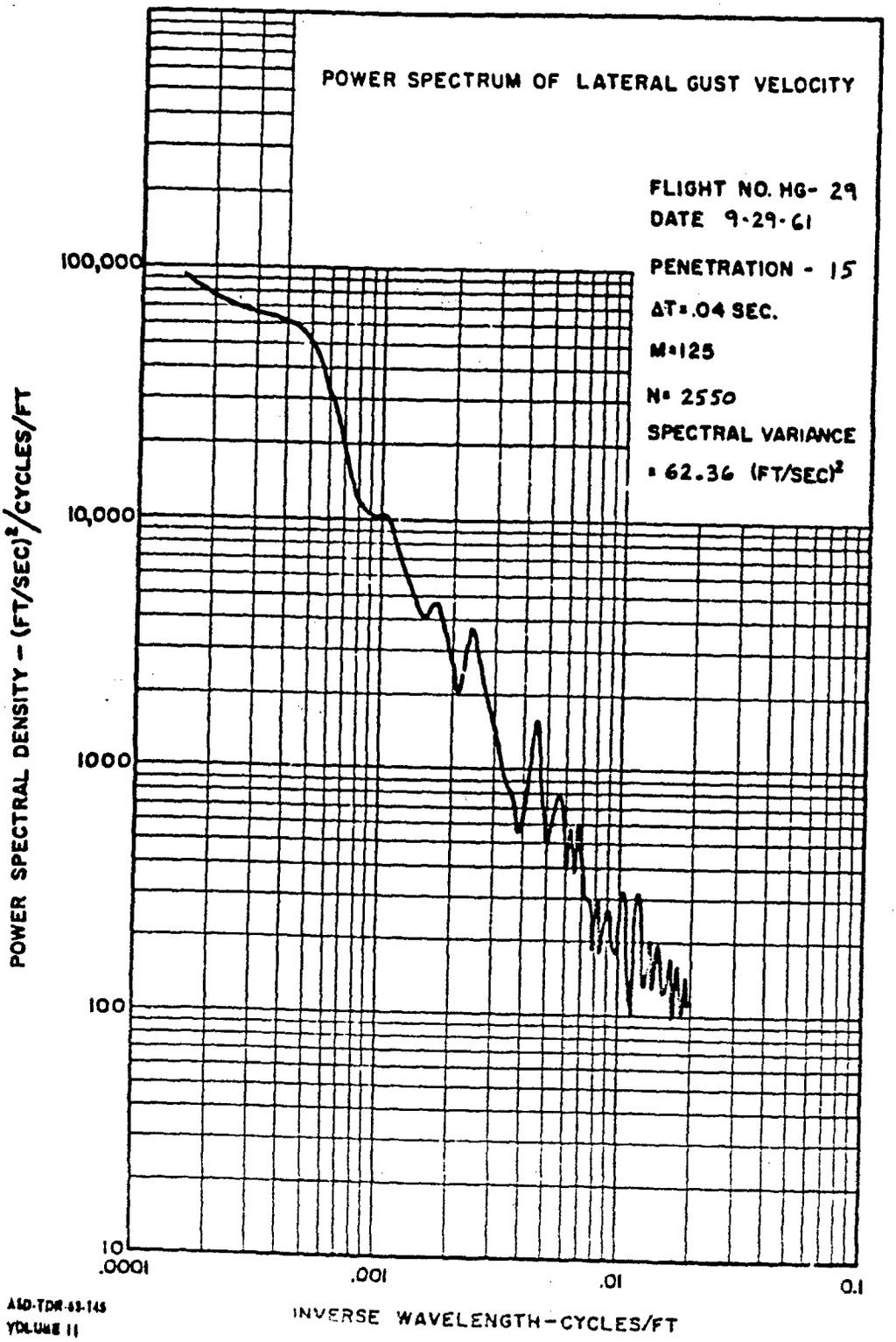

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 43.70 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

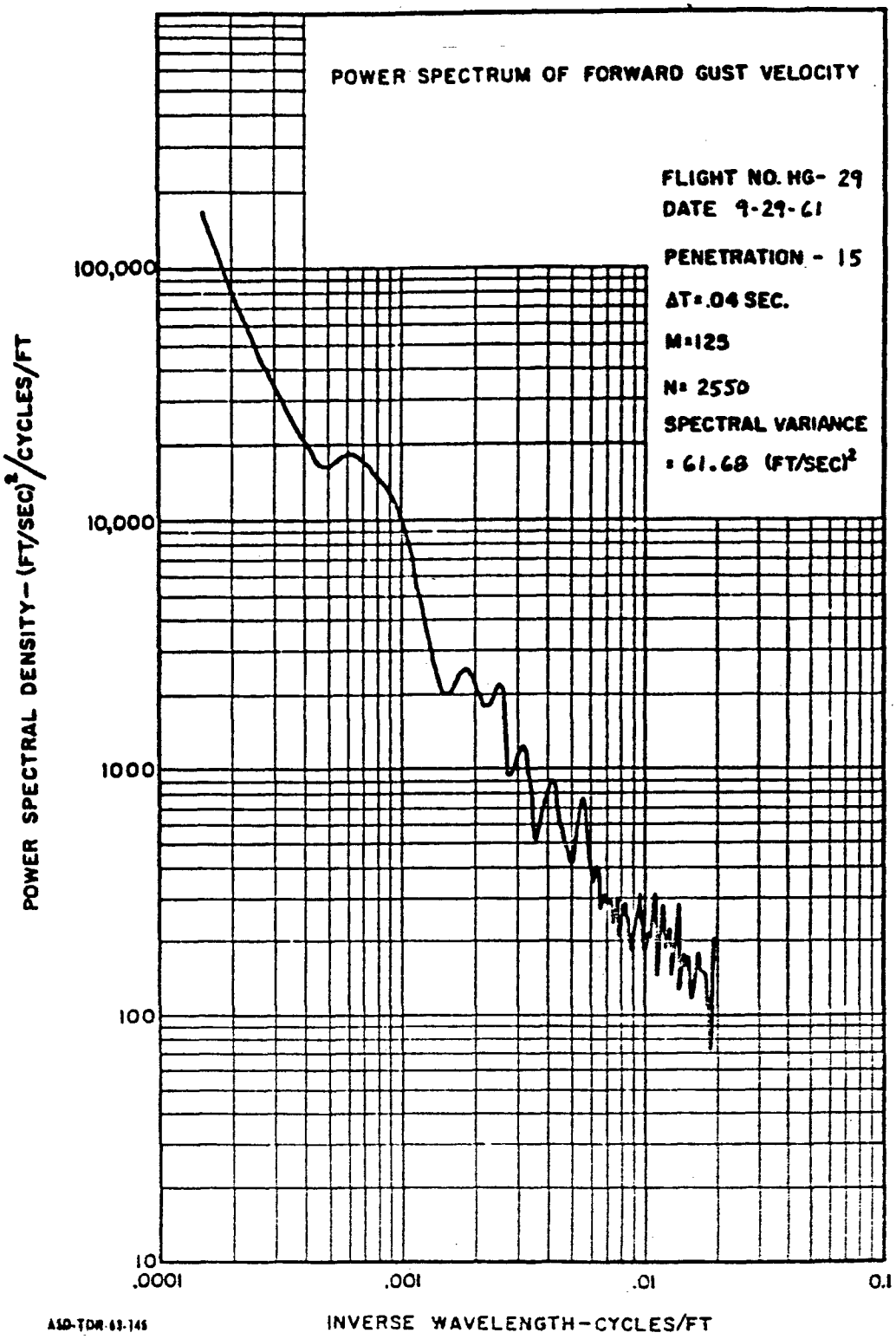

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 35.80 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

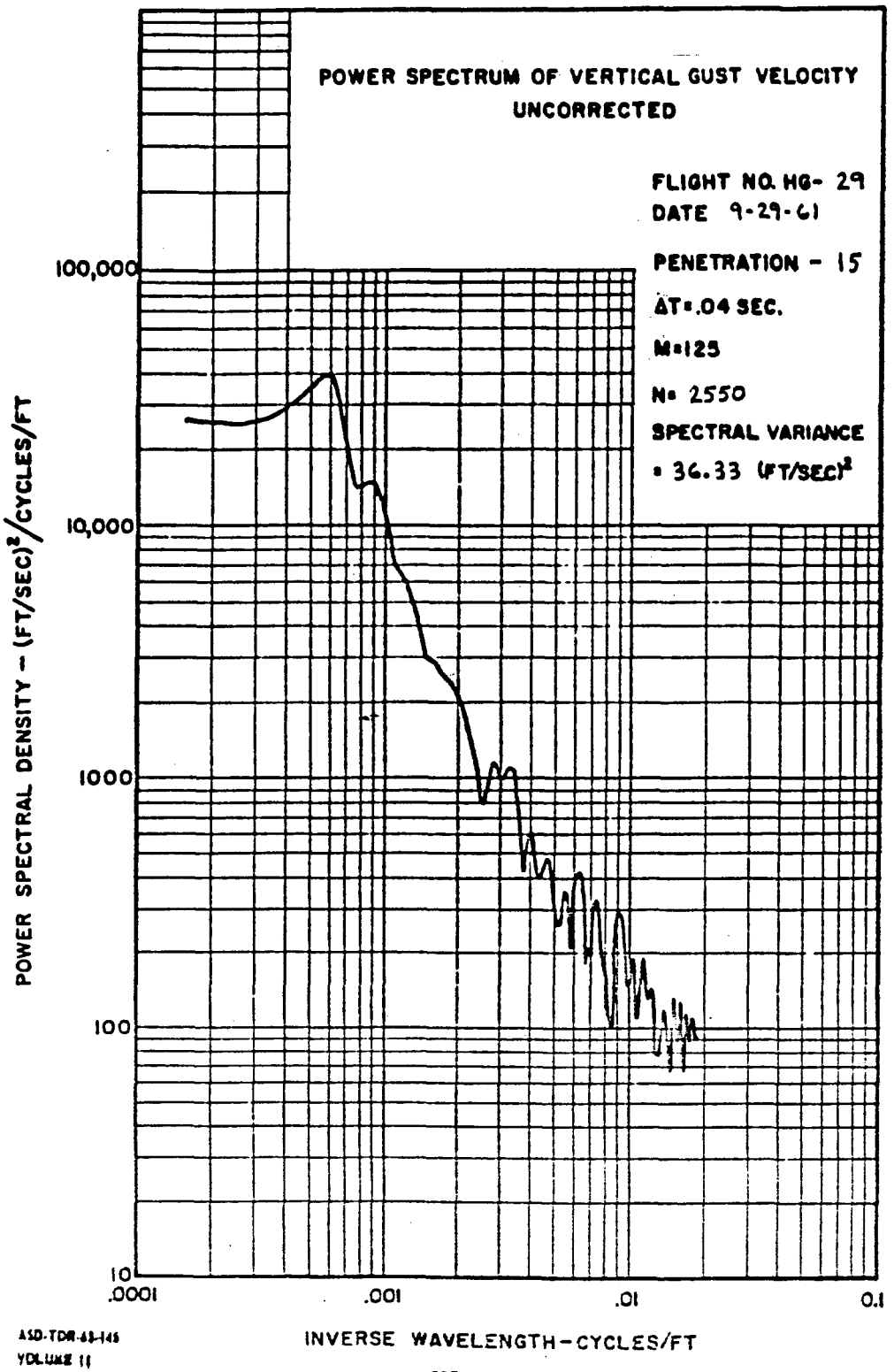

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 25.25 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

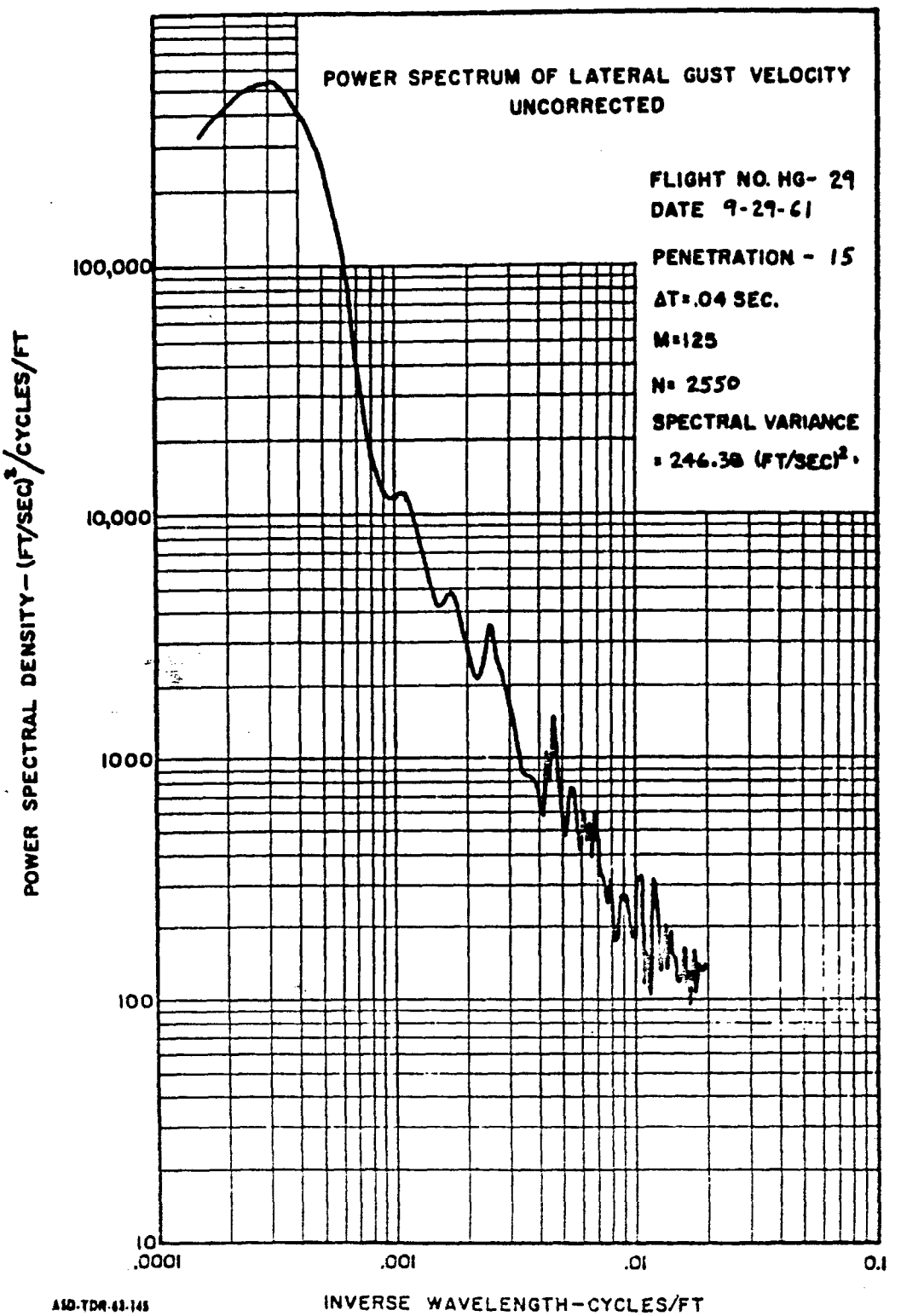

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 118.23 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

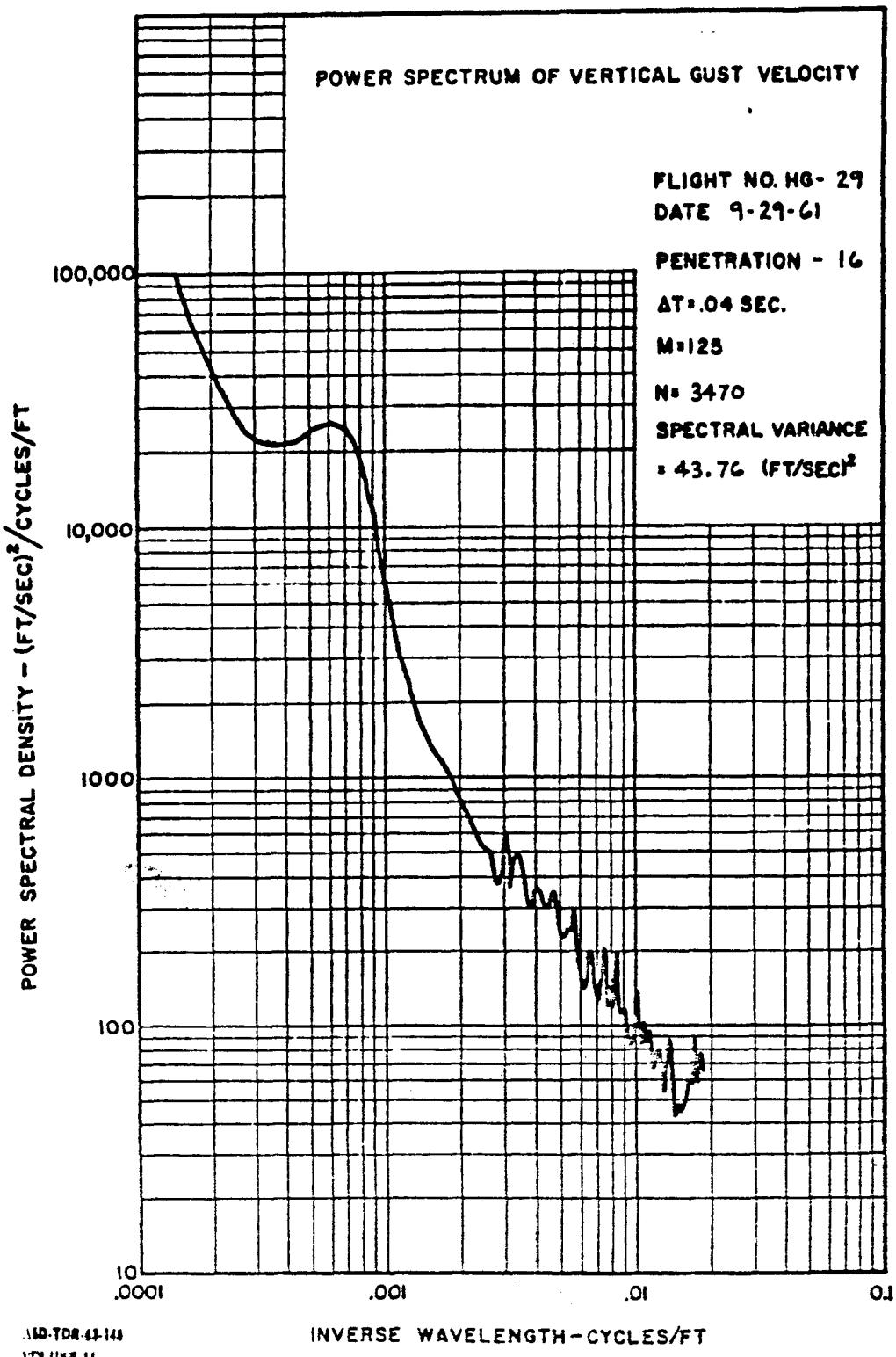

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 2550
SPECTRAL VARIANCE
= 75.69 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

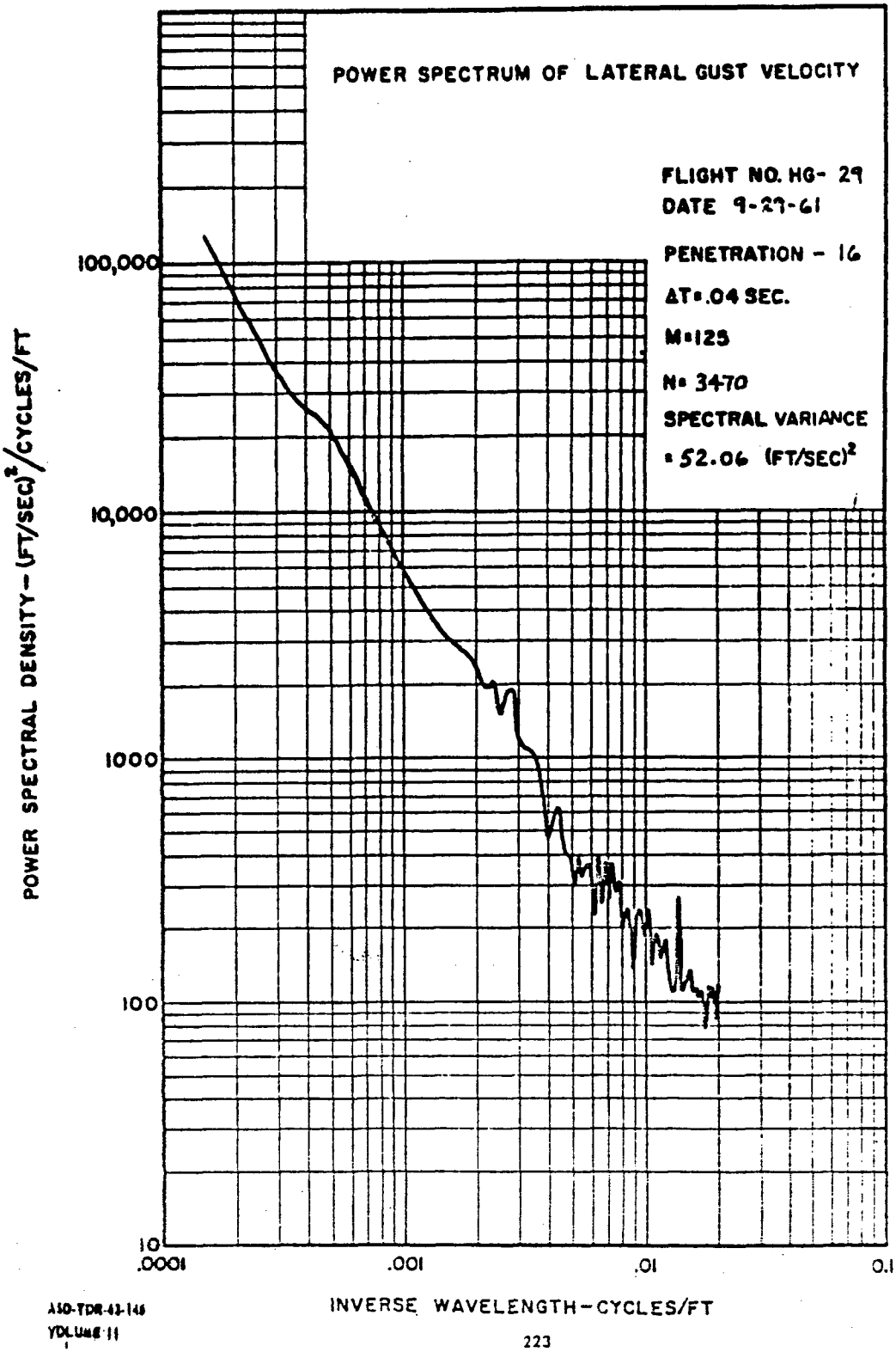

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 2550
SPECTRAL VARIANCE
= 62.36 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

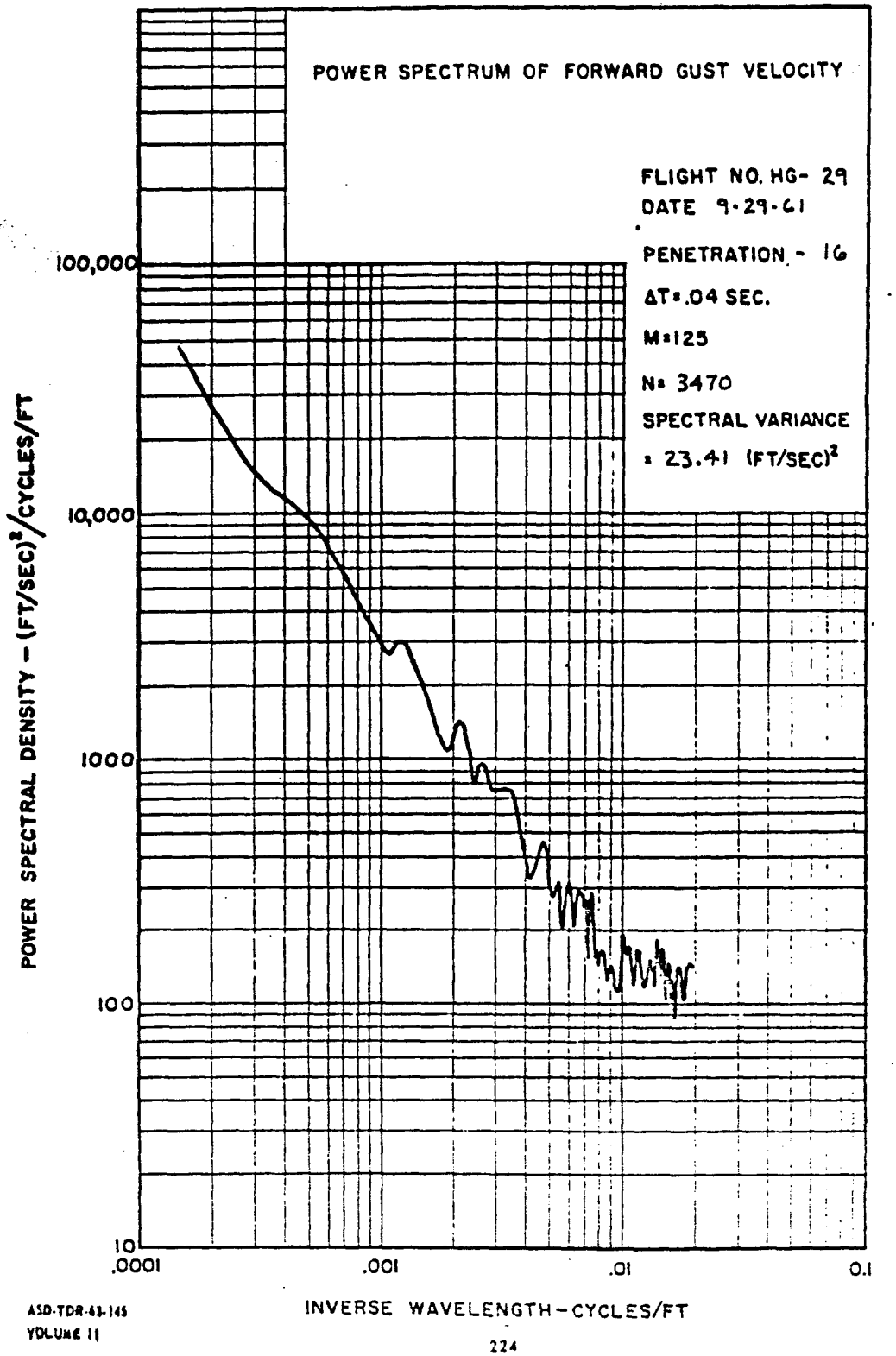

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 2550
SPECTRAL VARIANCE
= 61.68 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

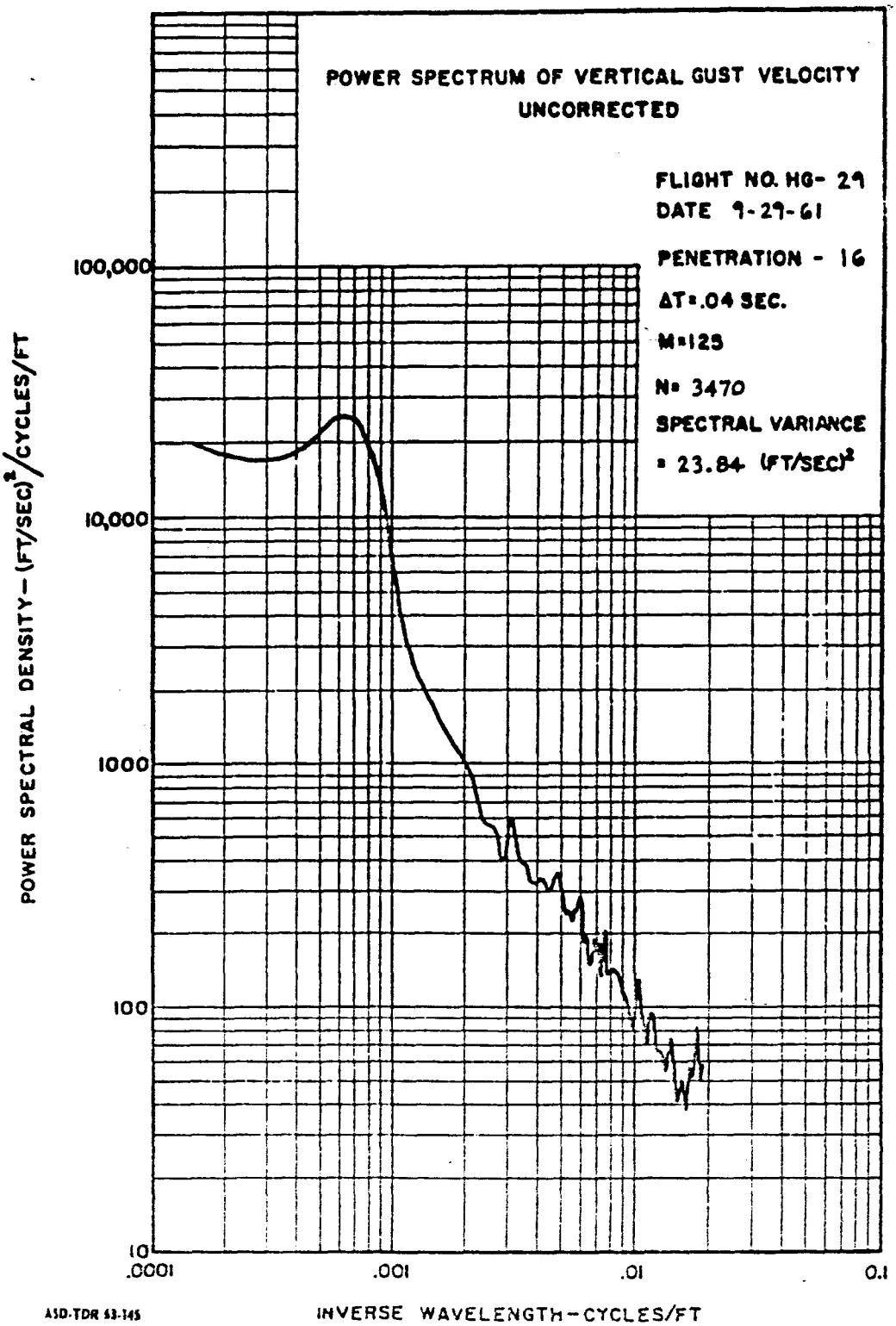

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 2550
SPECTRAL VARIANCE
= 36.33 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

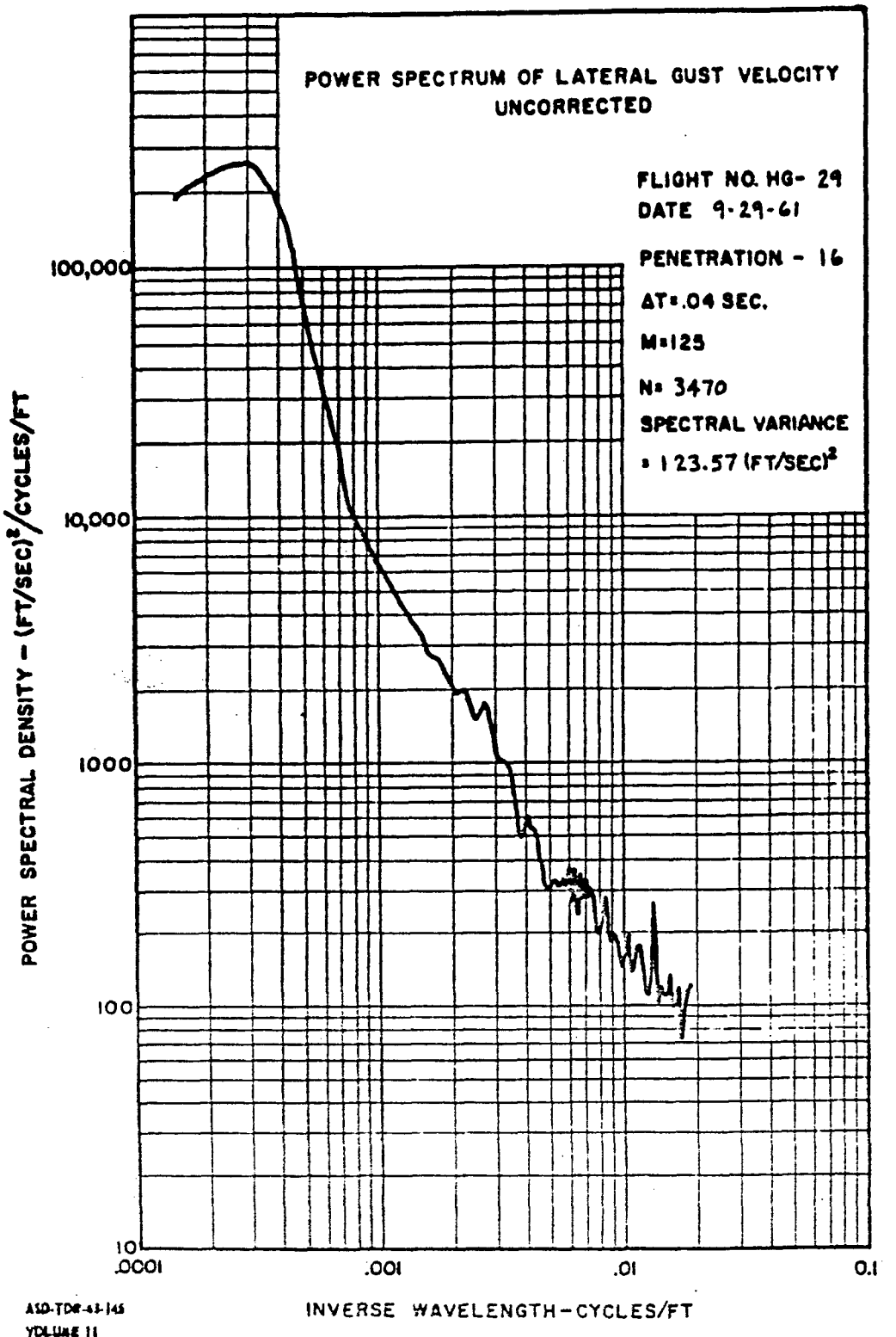

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 2550
SPECTRAL VARIANCE
= 246.38 (FT/SEC)²
POWER SPECTRAL DENSITY – (FT/SEC)³/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH – CYCLES/FT

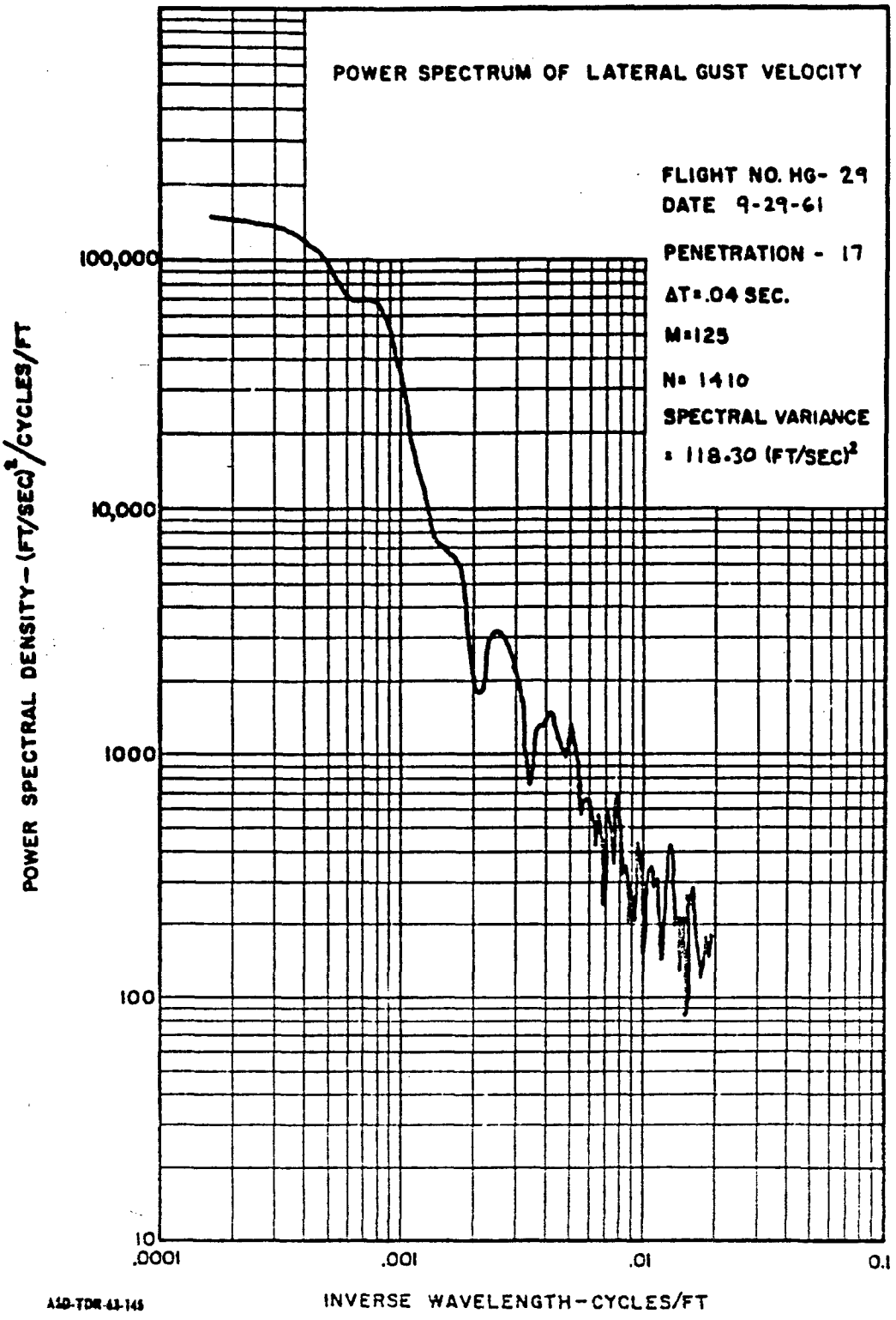

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 16
ΔT=.04 SEC.
M=125
N= 3470
SPECTRAL VARIANCE
= 43.76 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

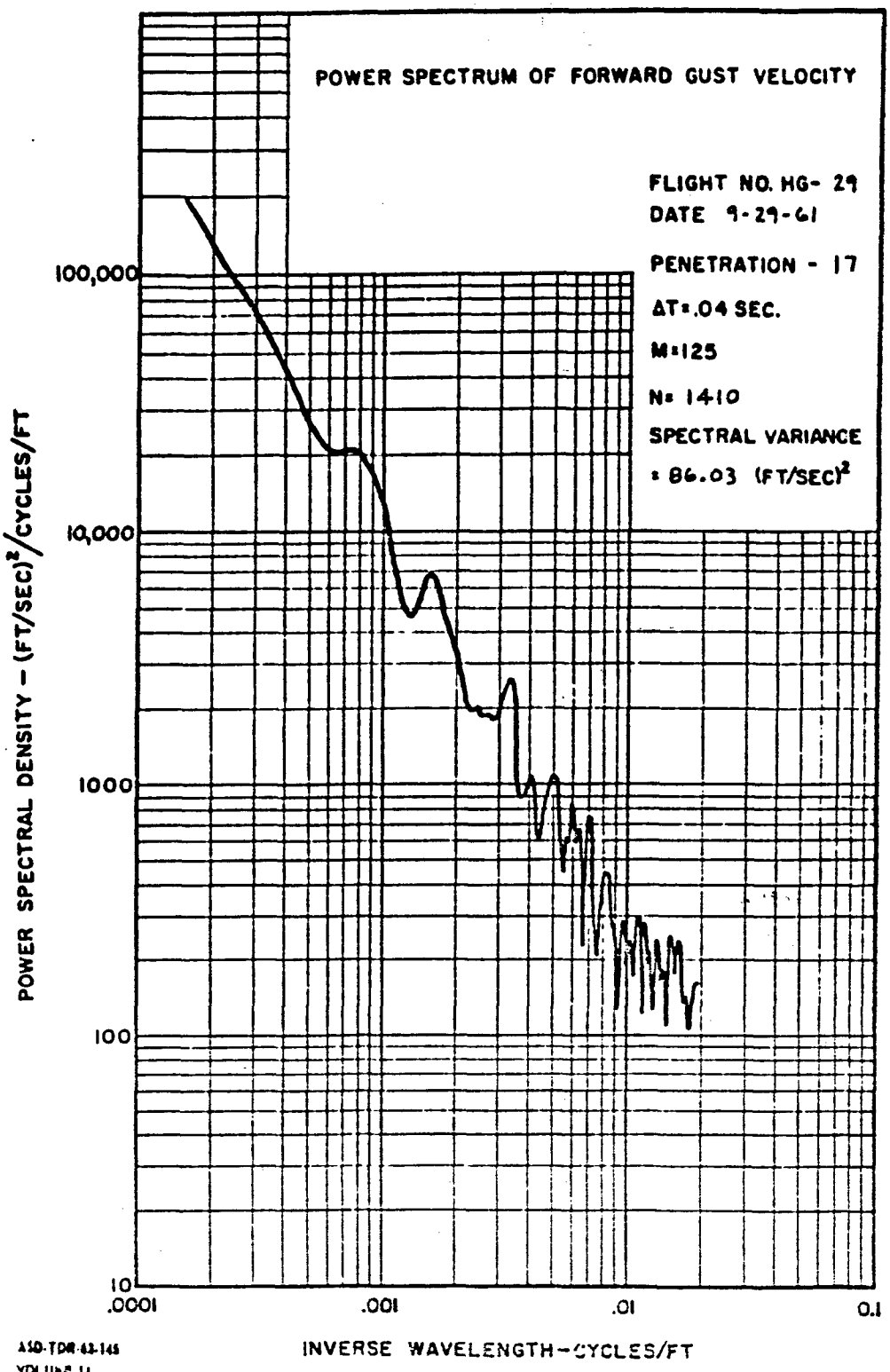

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 16
ΔT=.04 SEC.
M=125
N= 3470
SPECTRAL VARIANCE
=52.06 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

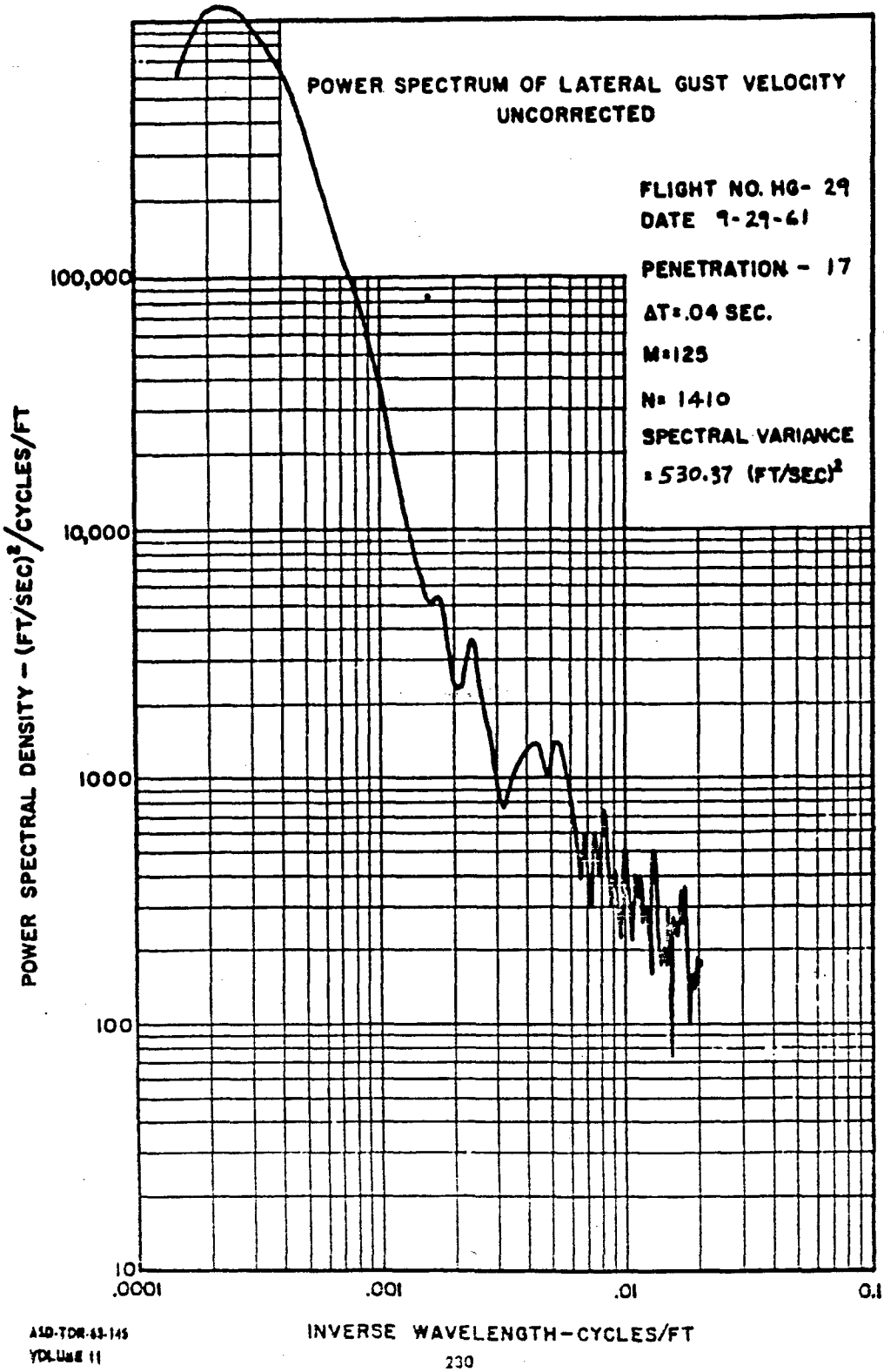

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 16
ΔT=.04 SEC.
M=125
N= 3470
SPECTRAL VARIANCE
= 23.41 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

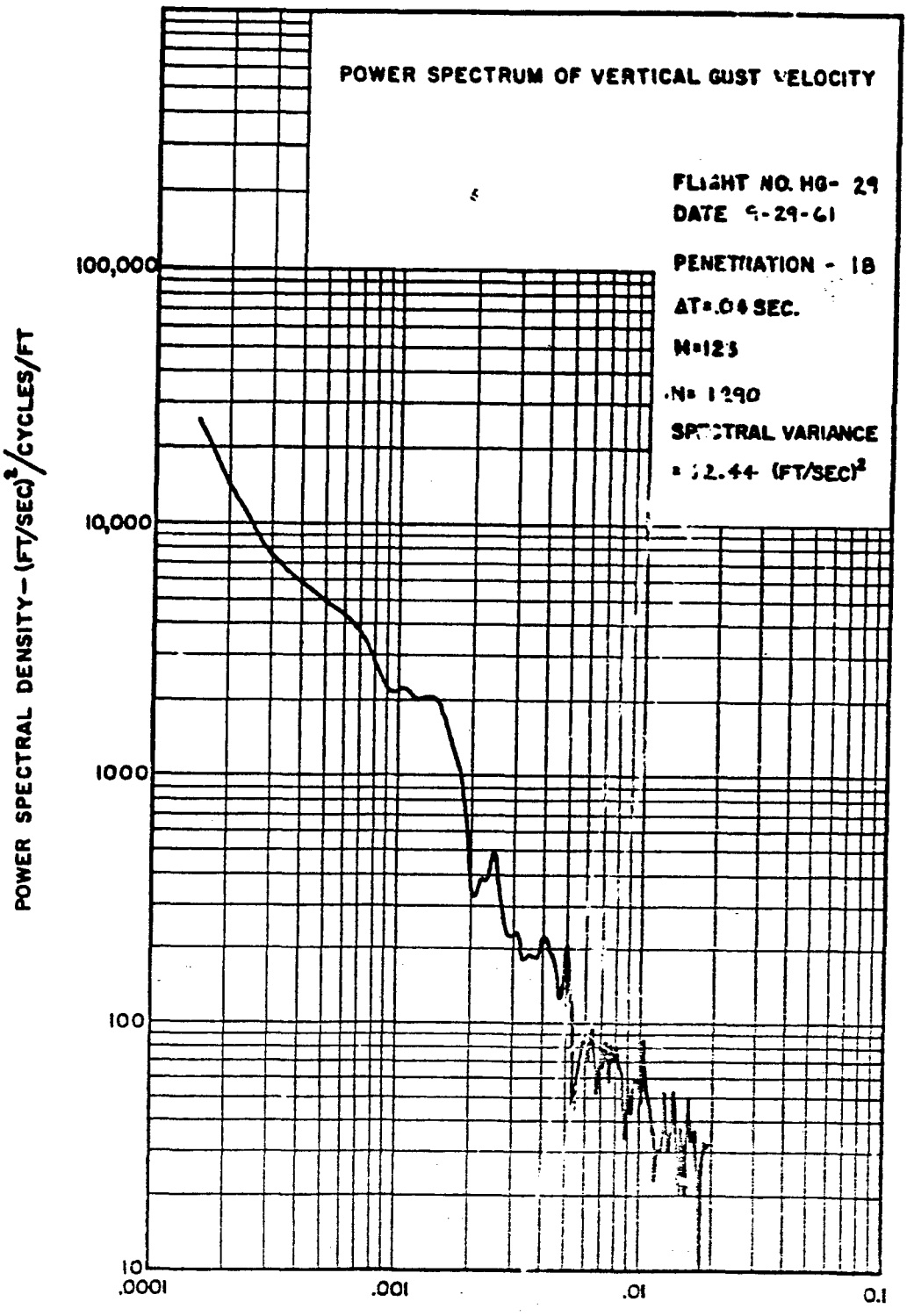

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 16
ΔT=.04 SEC.
M=125
N= 3470
SPECTRAL VARIANCE
= 23.84 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

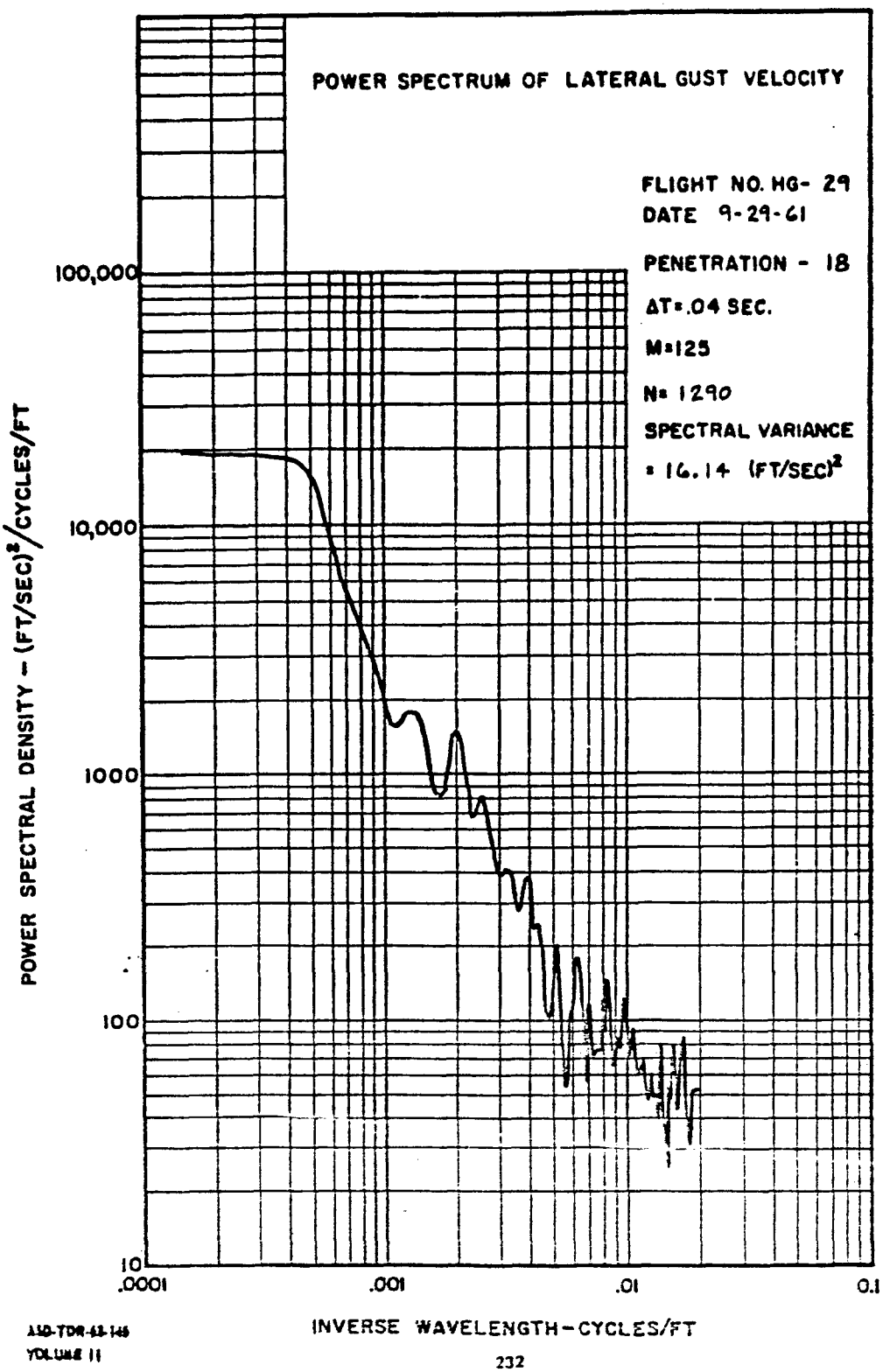

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 16
ΔT=.04 SEC.
M=125
N= 3470
SPECTRAL VARIANCE
= 123.57 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

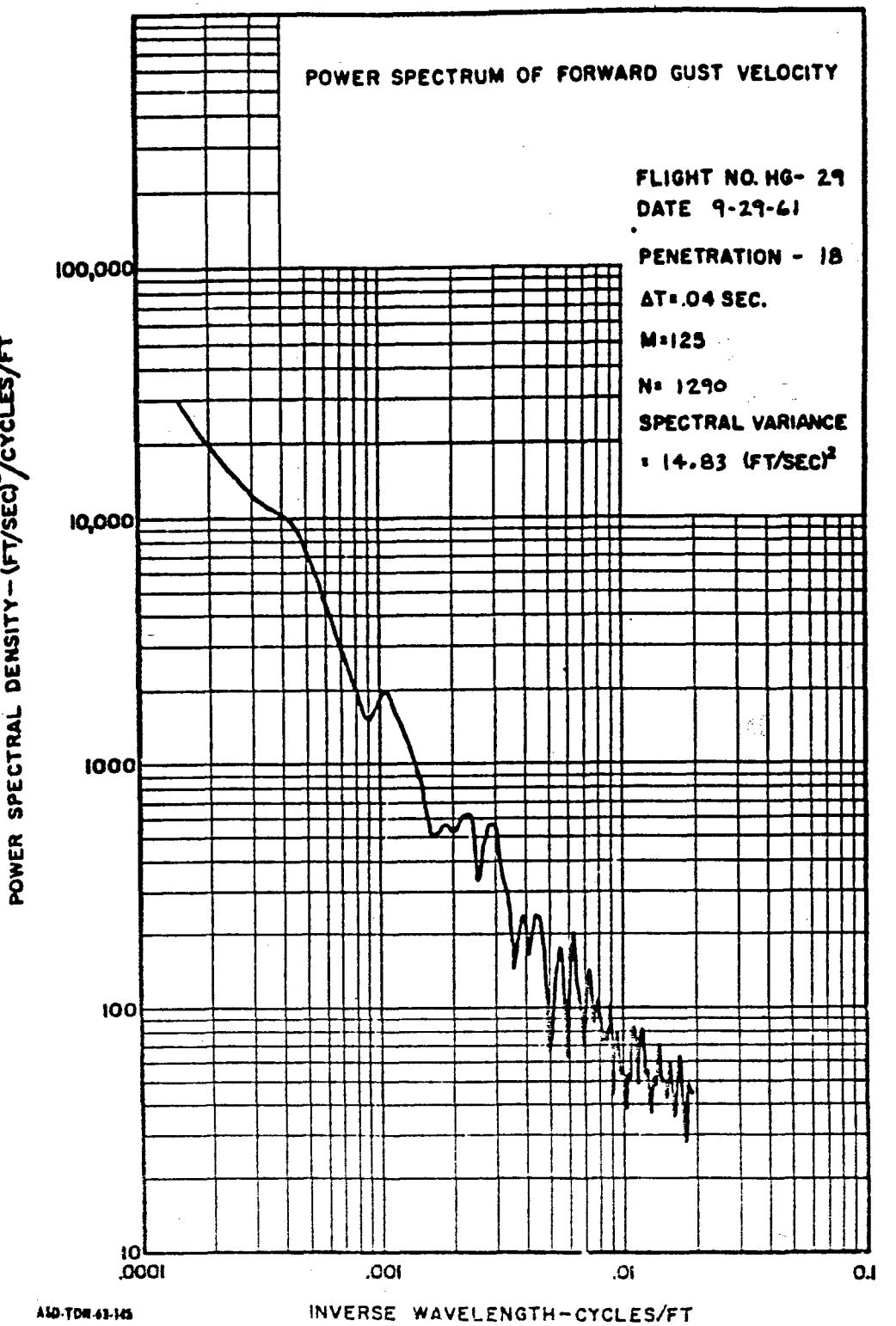

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 17
ΔT=.04 SEC.
M=125
N= 1410
SPECTRAL VARIANCE
= 118.30 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

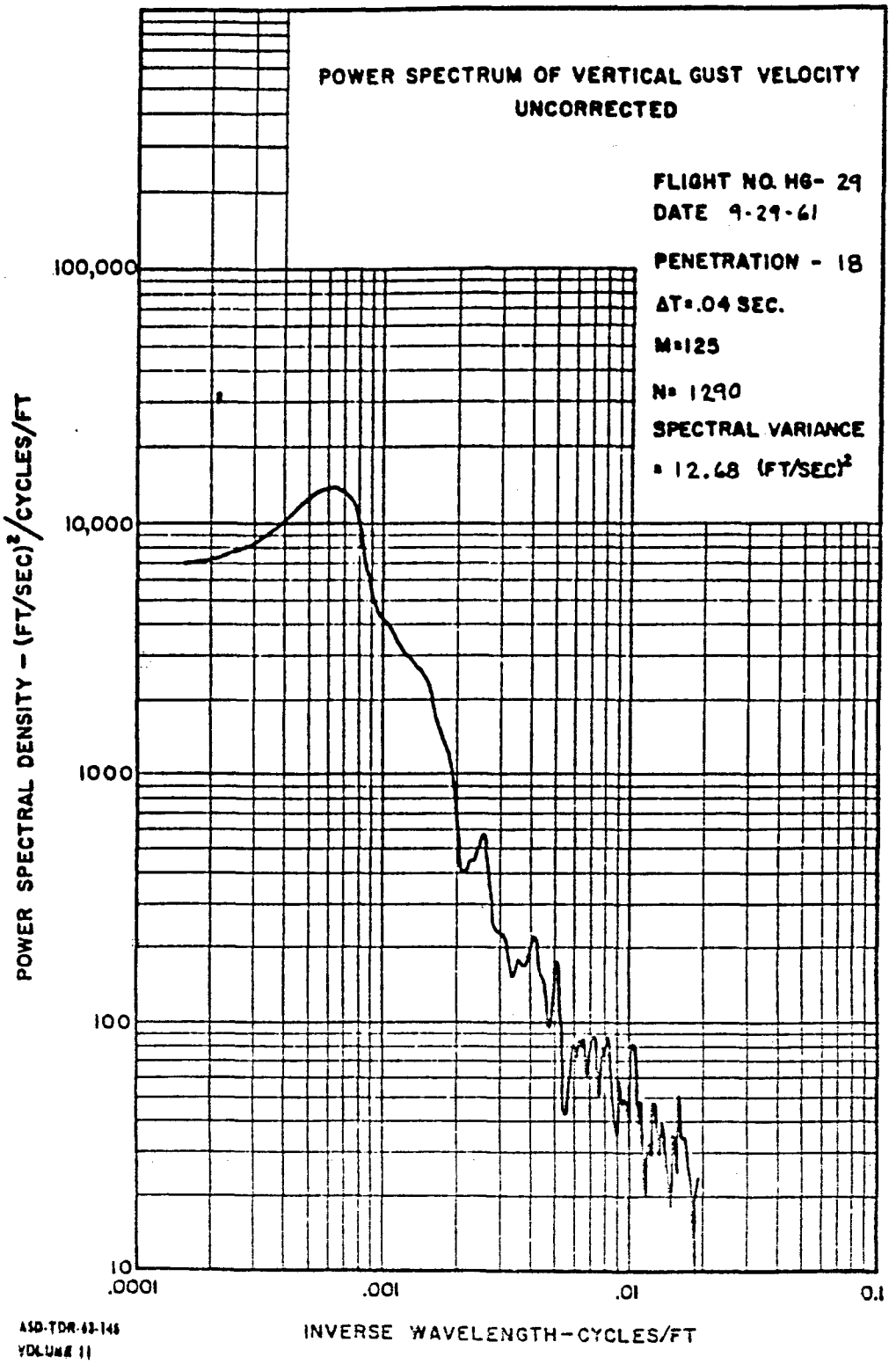

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 17
ΔT=.04 SEC.
M=125
N= 1410
SPECTRAL VARIANCE
= 86.03 (FT/SEC)²
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH – CYCLES/FT

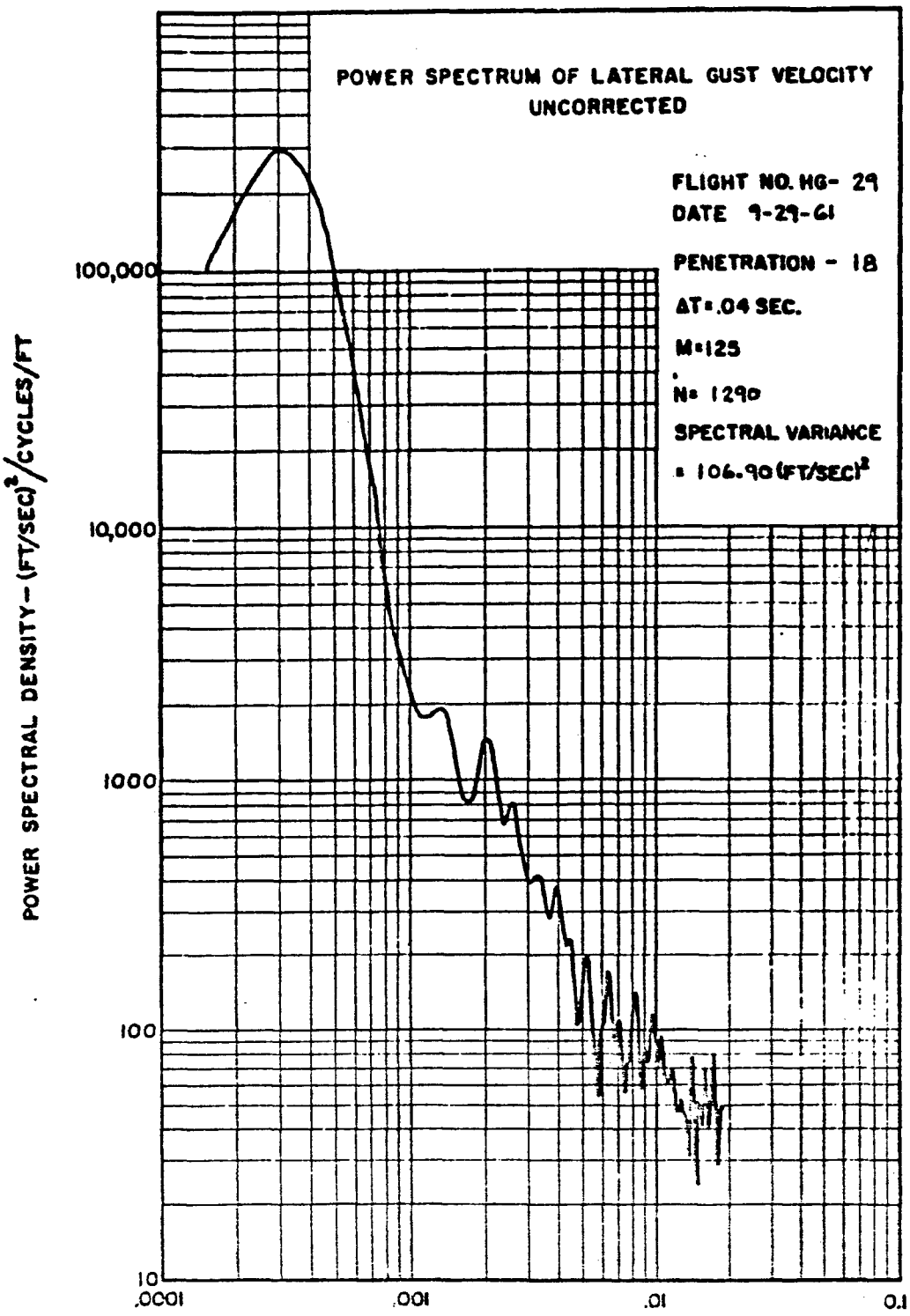

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 17
ΔT=.04 SEC.
M=125
N= 1410
SPECTRAL VARIANCE
=530.37 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

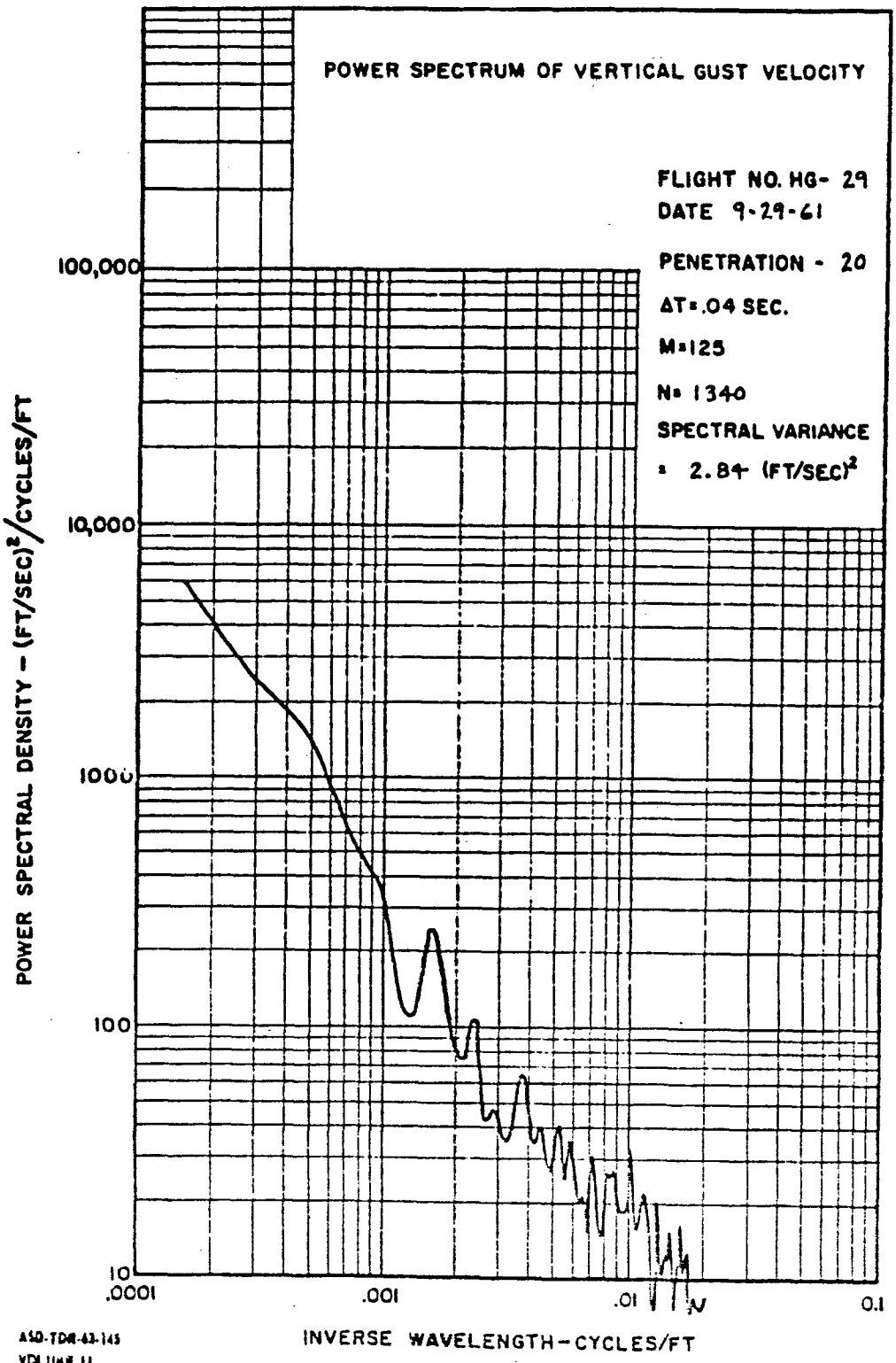

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 18
ΔT=.04 SEC.
M=123
N= 1290
SPECTRAL VARIANCE
= 12.44 (FT/SEC)²
POWER SPECTRAL DENSITY—(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH—CYCLES/FT

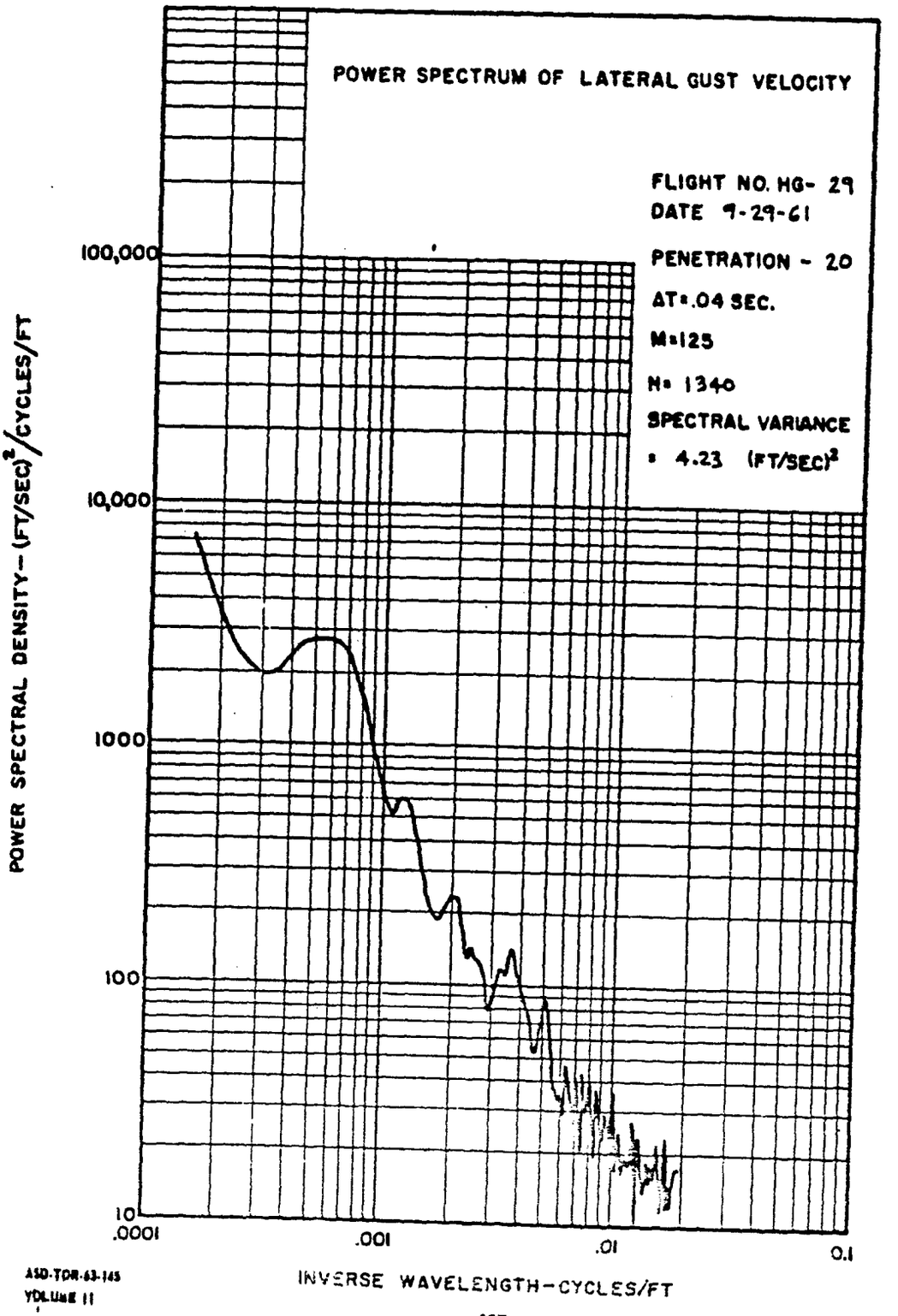

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 18
ΔT=.04 SEC.
M=125
N= 1290
SPECTRAL VARIANCE
= 16.14 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

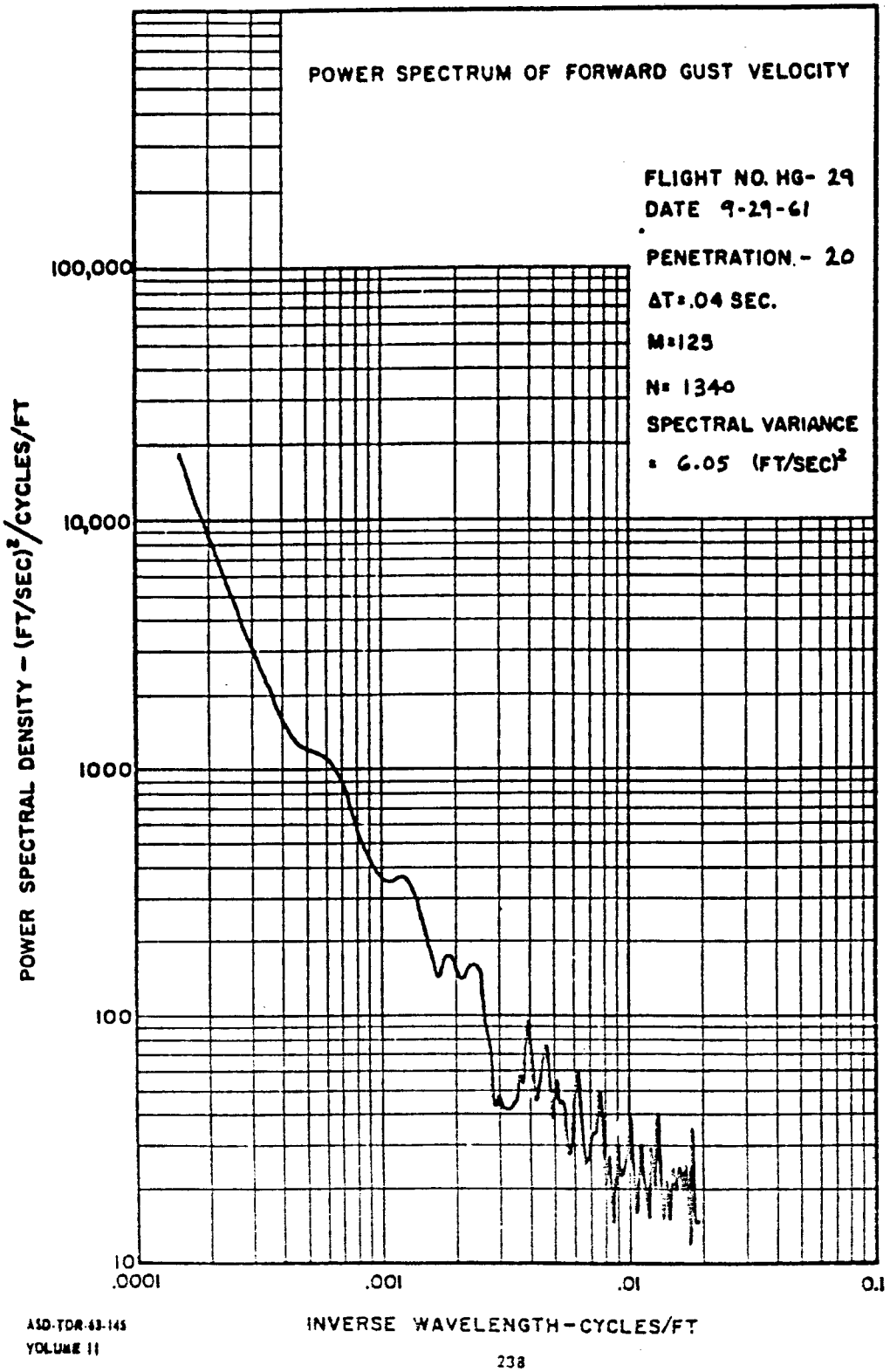

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 18
ΔT=.04 SEC.
M=125
N= 1290
SPECTRAL VARIANCE
= 14.83 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

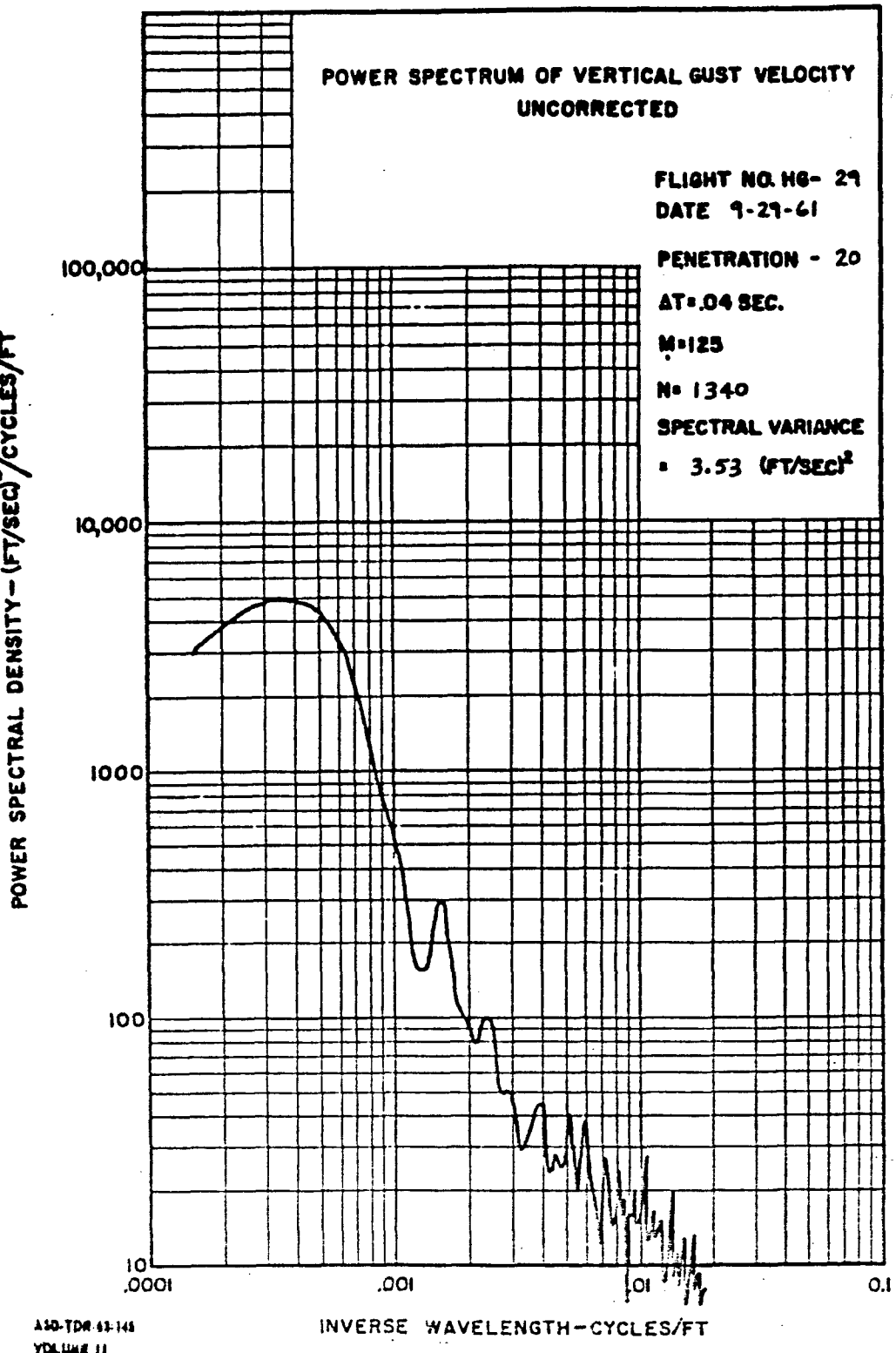

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 18
ΔT=.04 SEC.
M=125
N= 1290
SPECTRAL VARIANCE
= 12.68 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

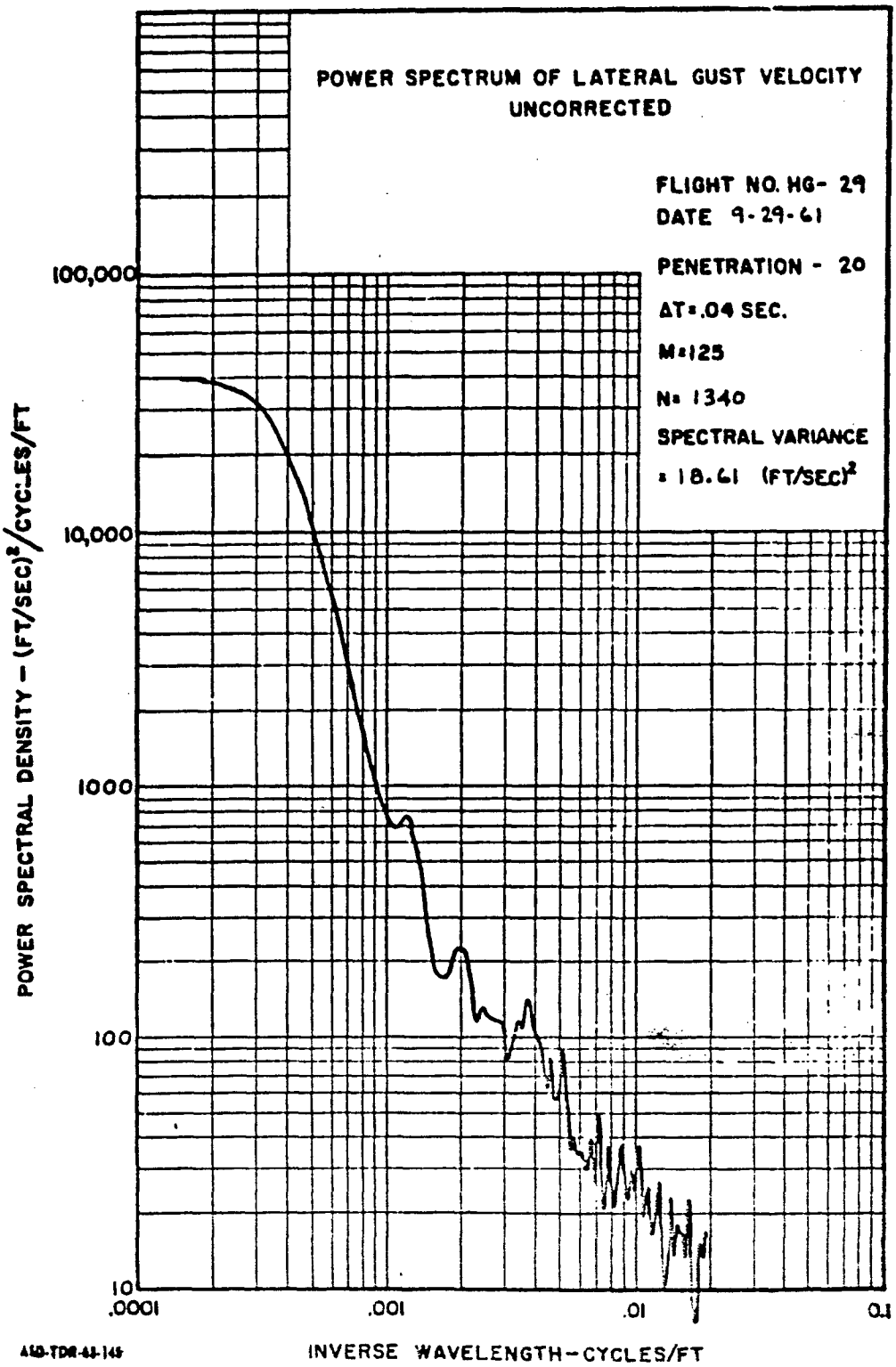

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 18
ΔT=.04 SEC.
M=125
N= 1290
SPECTRAL VARIANCE
= 106.90 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

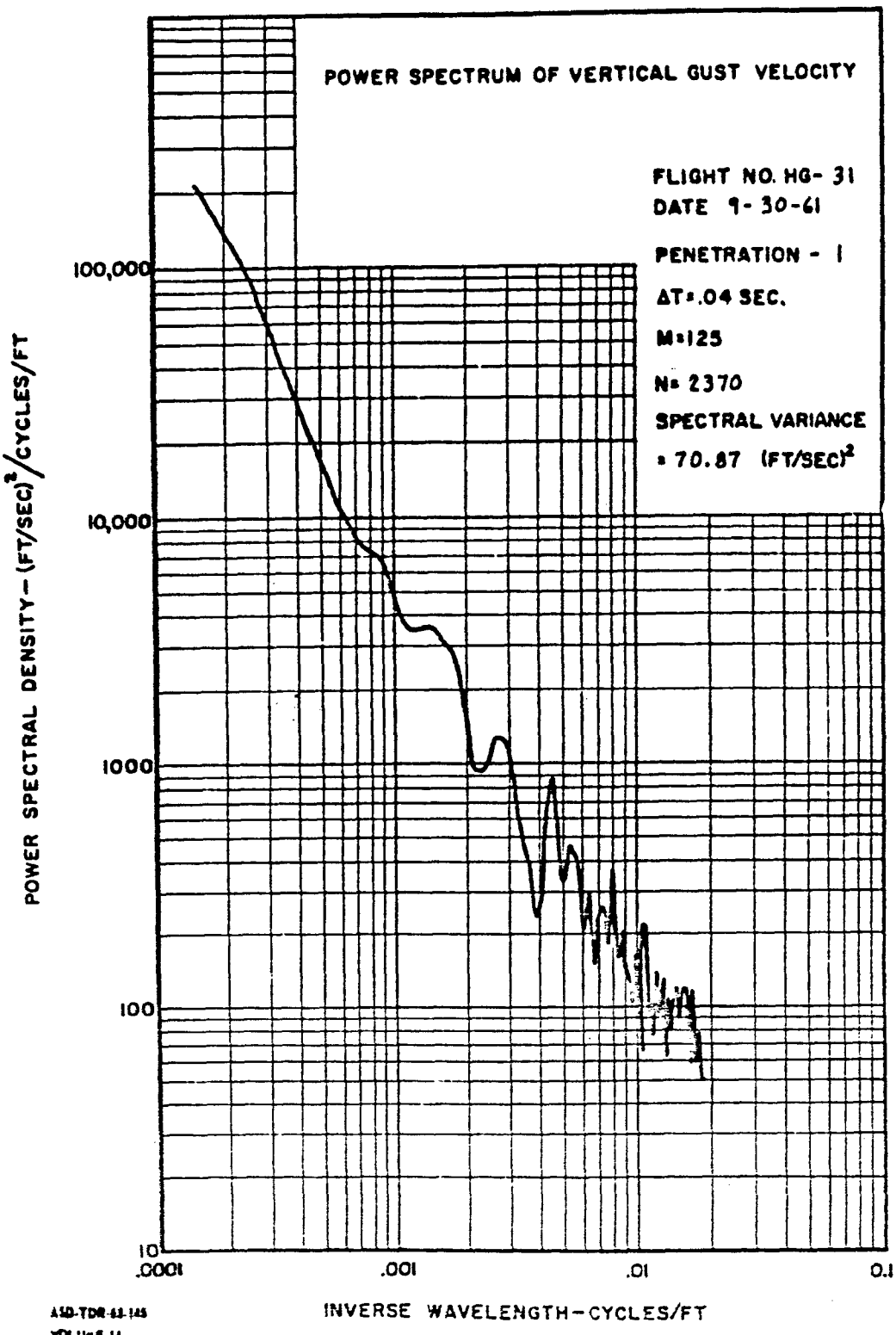

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 20
ΔT=.04 SEC.
M=125
N= 1340
SPECTRAL VARIANCE
= 2.84 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

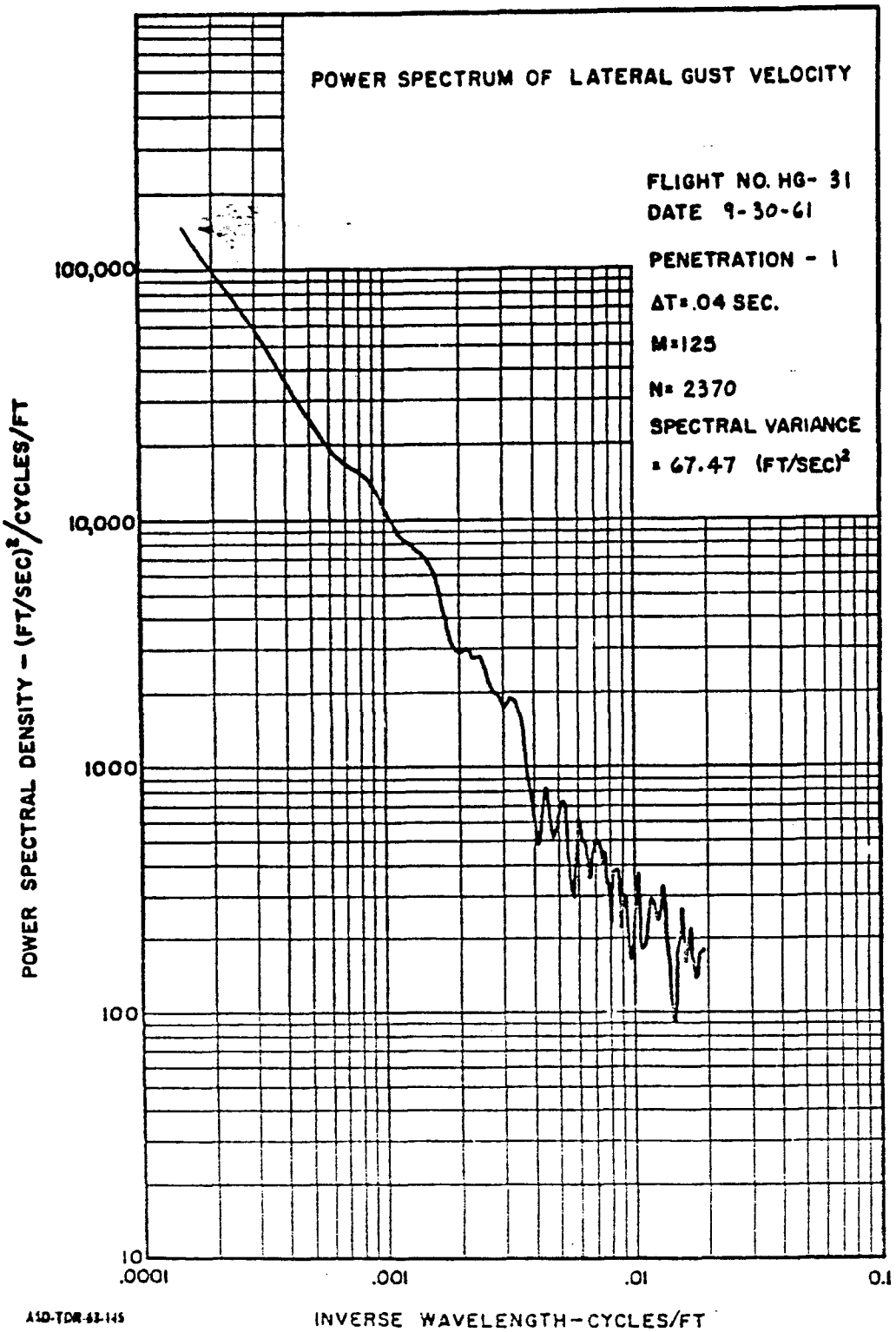

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 20
ΔT=.04 SEC.
M=125
N= 1340
SPECTRAL VARIANCE
= 4.23 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

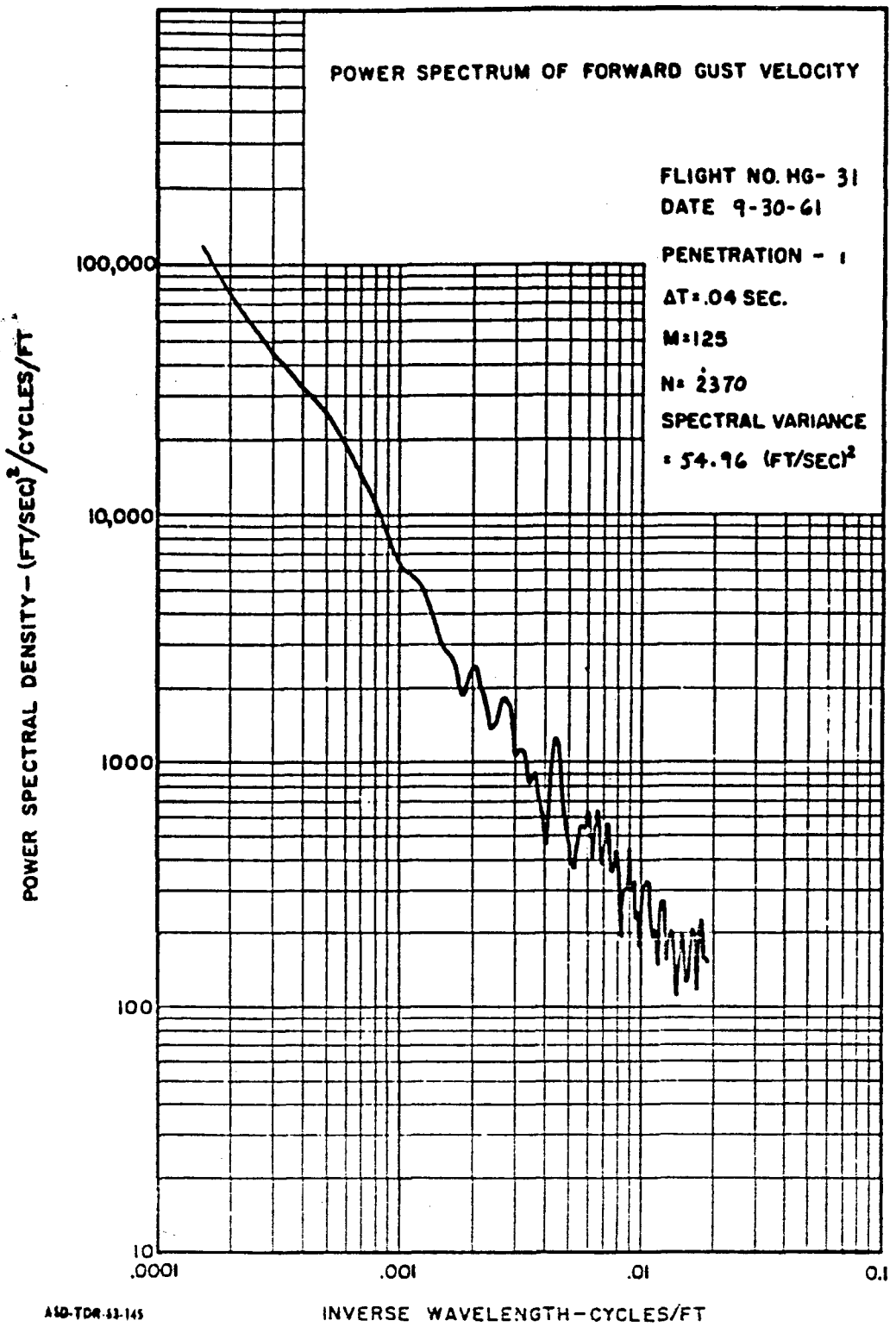

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION.- 20
ΔT=.04 SEC.
M=125
N= 1340
SPECTRAL VARIANCE
= 6.05 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

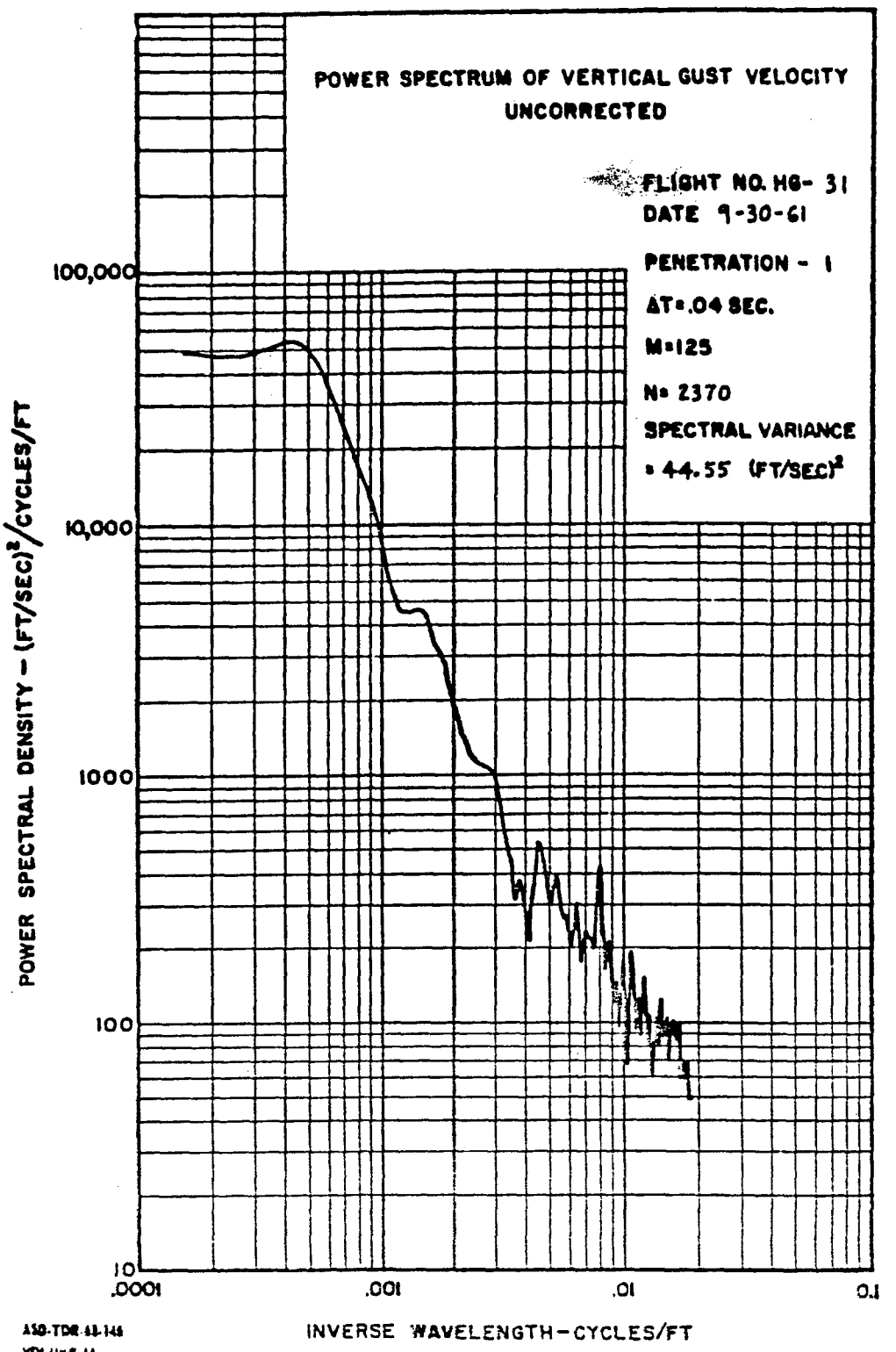

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 20
ΔT=.04 SEC.
M=125
N= 1340
SPECTRAL VARIANCE
= 3.53 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

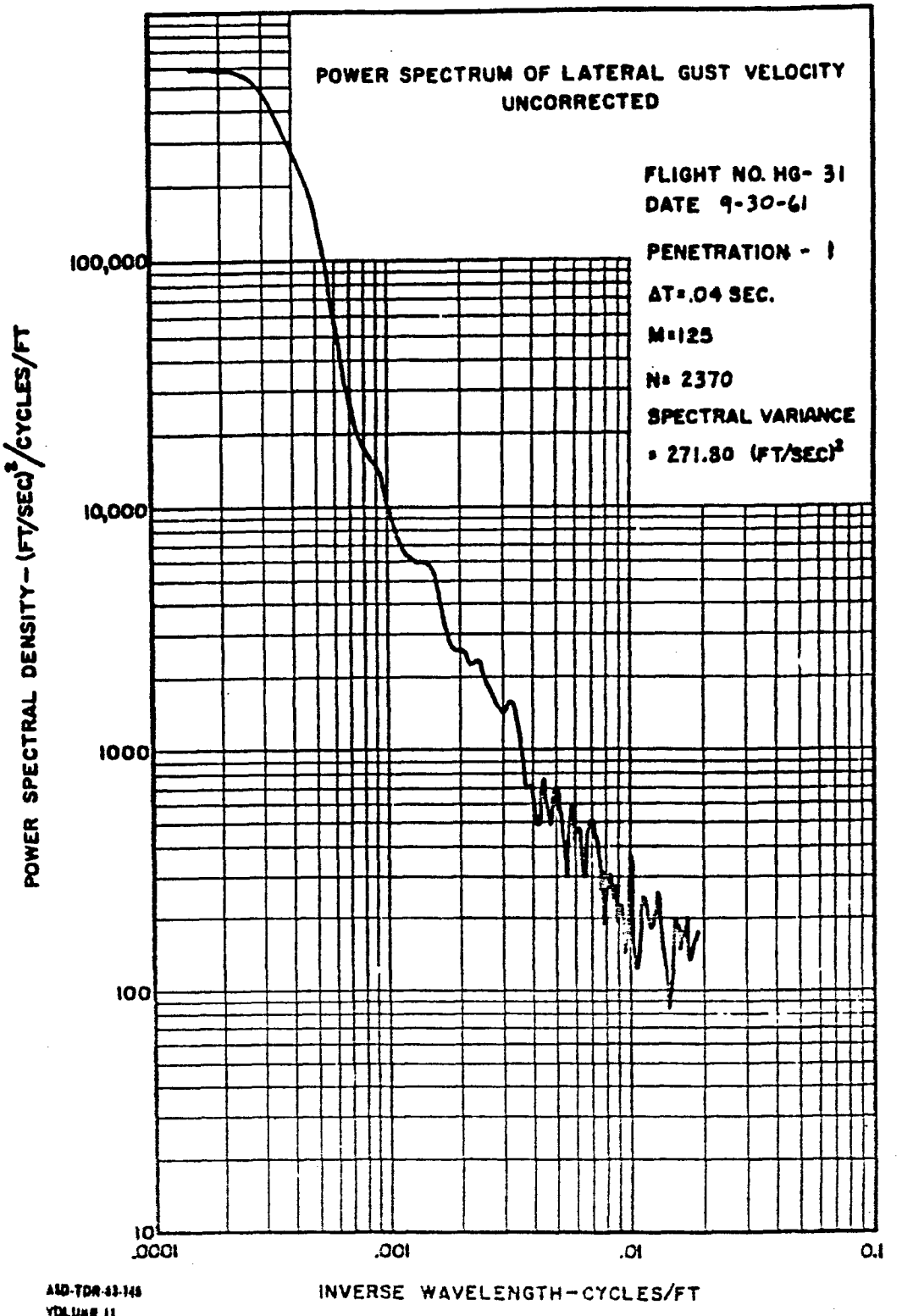

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 29
DATE 9-29-61
PENETRATION - 20
ΔT=.04 SEC.
M=125
N= 1340
SPECTRAL VARIANCE
= 18.61 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

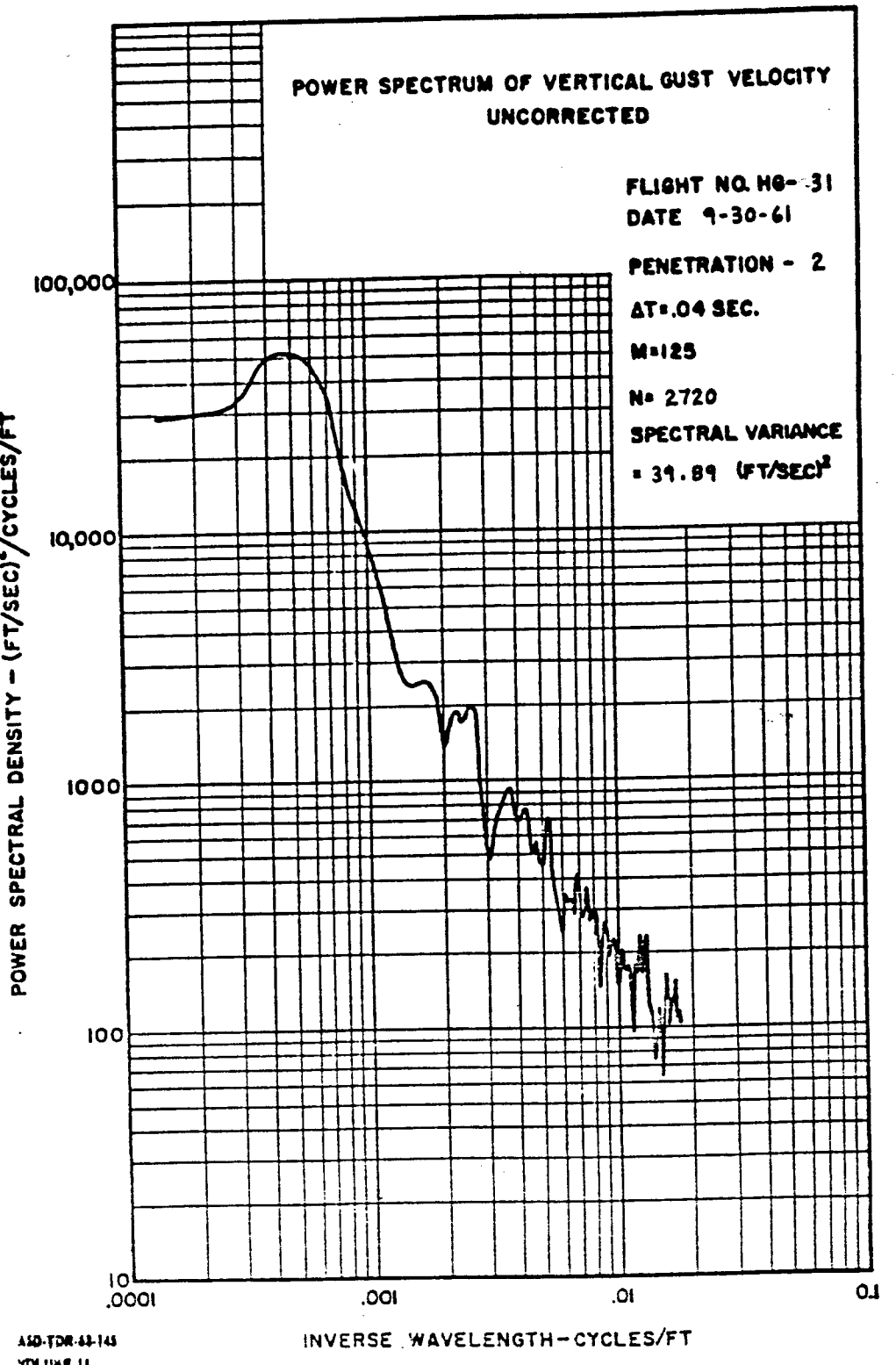

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2370
SPECTRAL VARIANCE
= 70.87 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

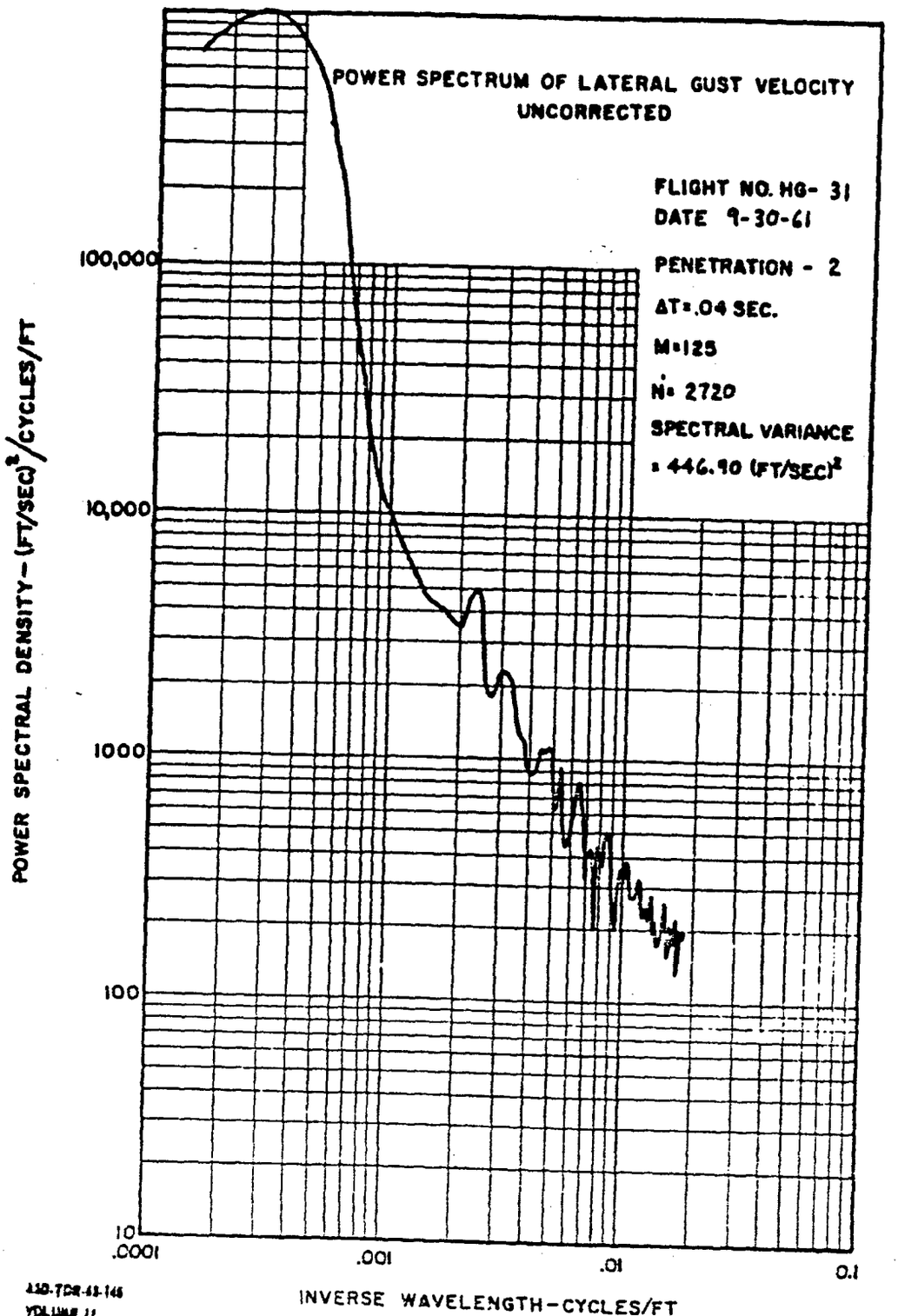

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2370
SPECTRAL VARIANCE
= 67.47 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT


POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2370
SPECTRAL VARIANCE
= 54.96 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

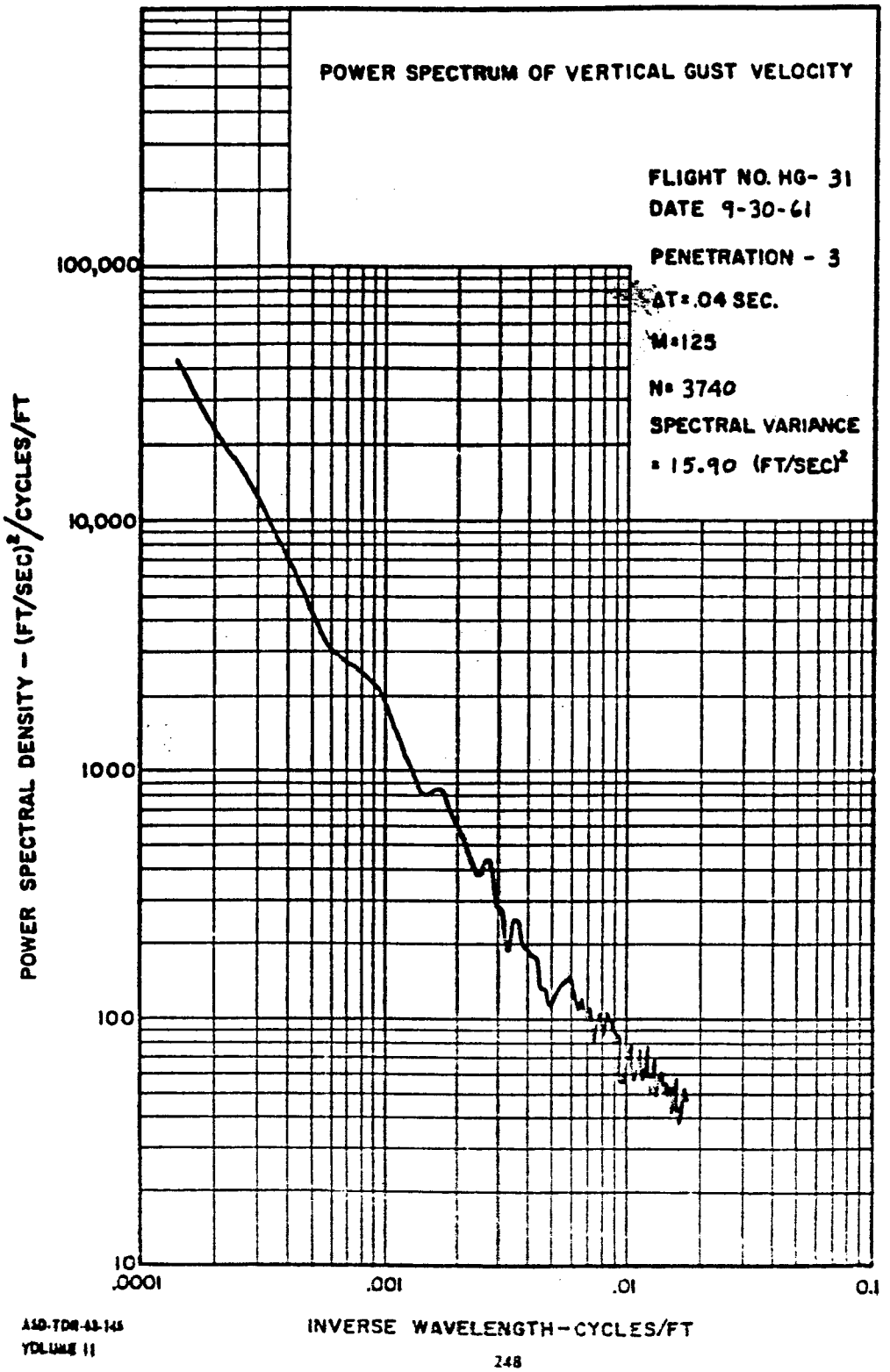

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2370
SPECTRAL VARIANCE
= 44.55 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

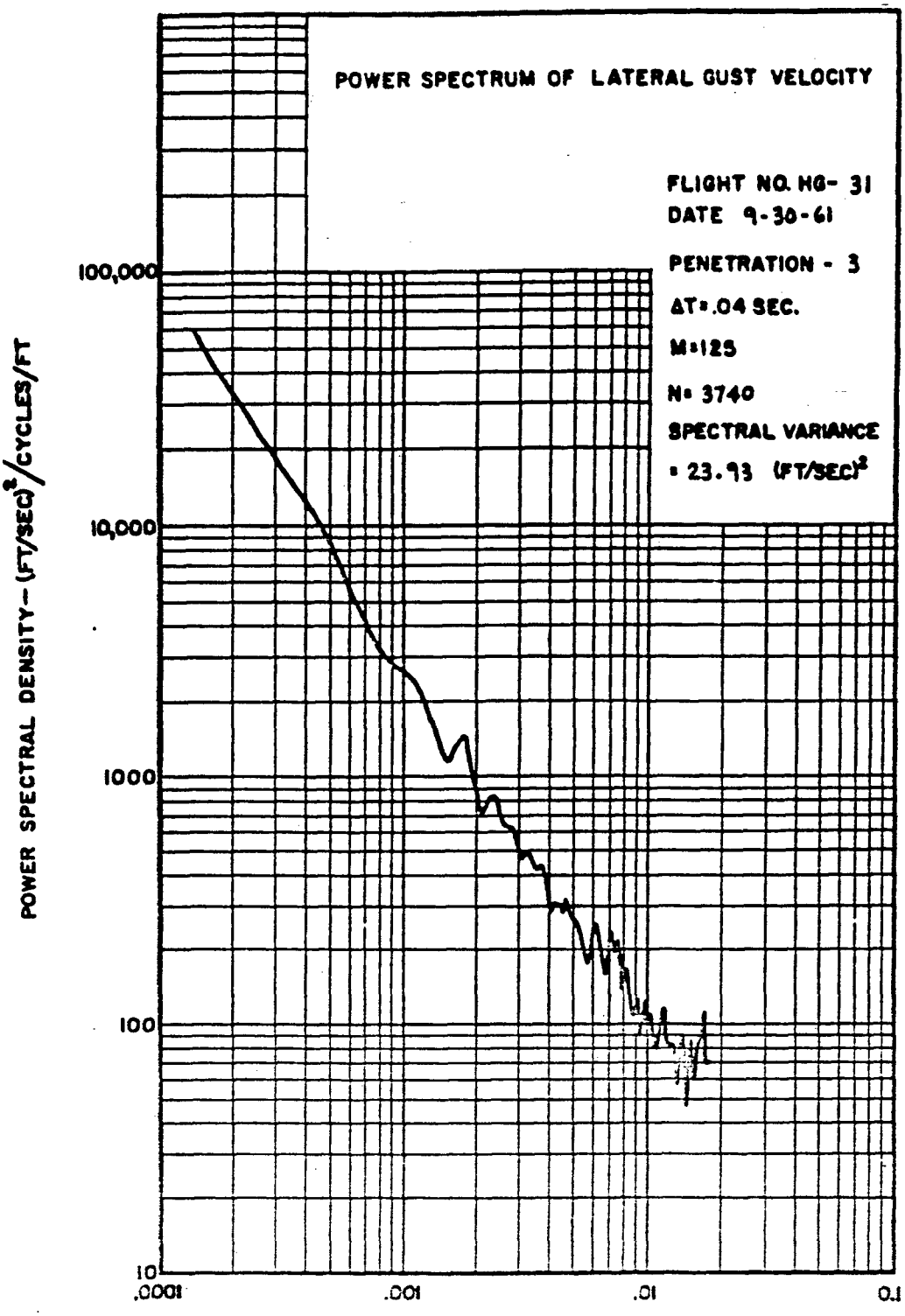

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2370
SPECTRAL VARIANCE
= 271.80 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

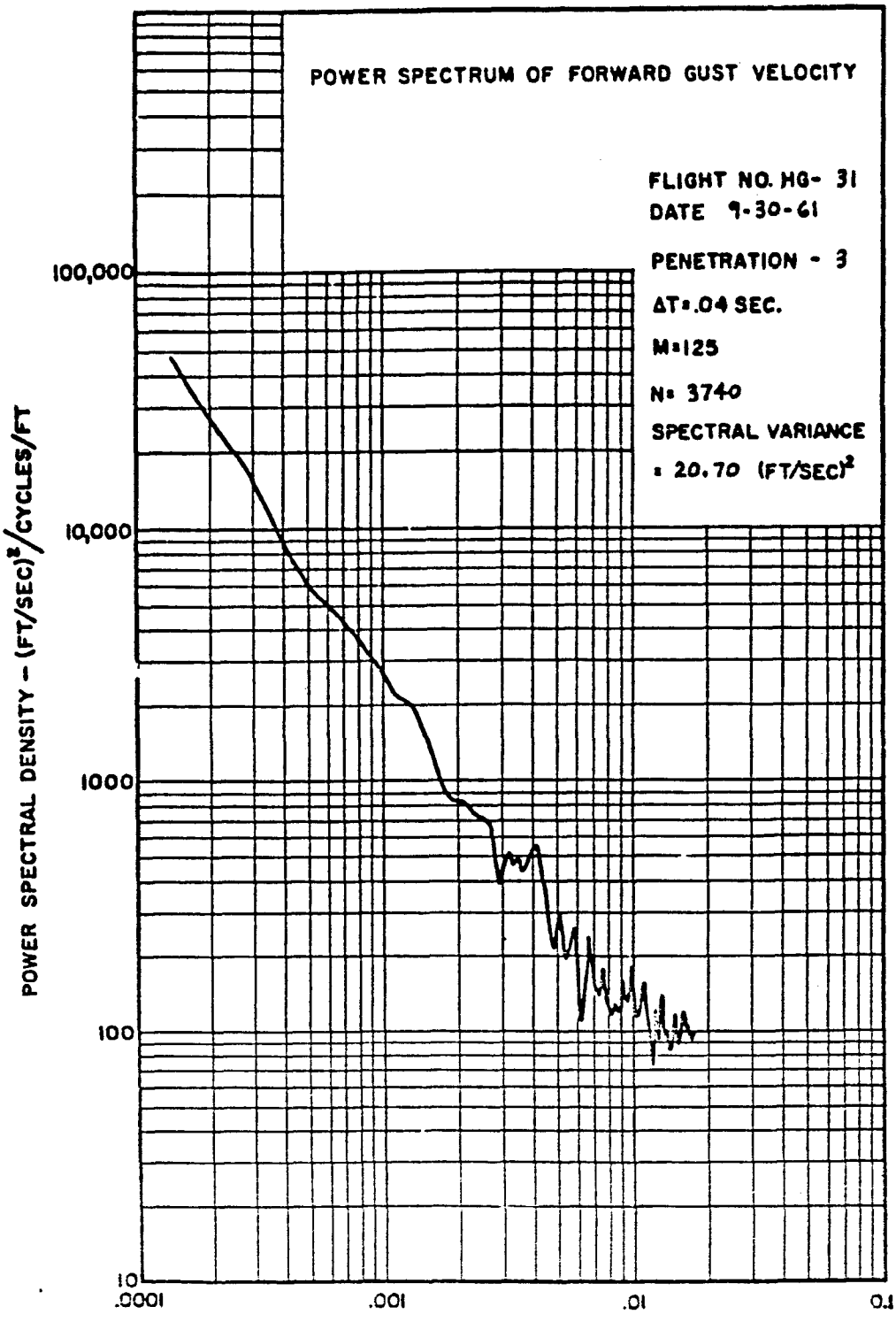

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2720
SPECTRAL VARIANCE
= 34.89 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

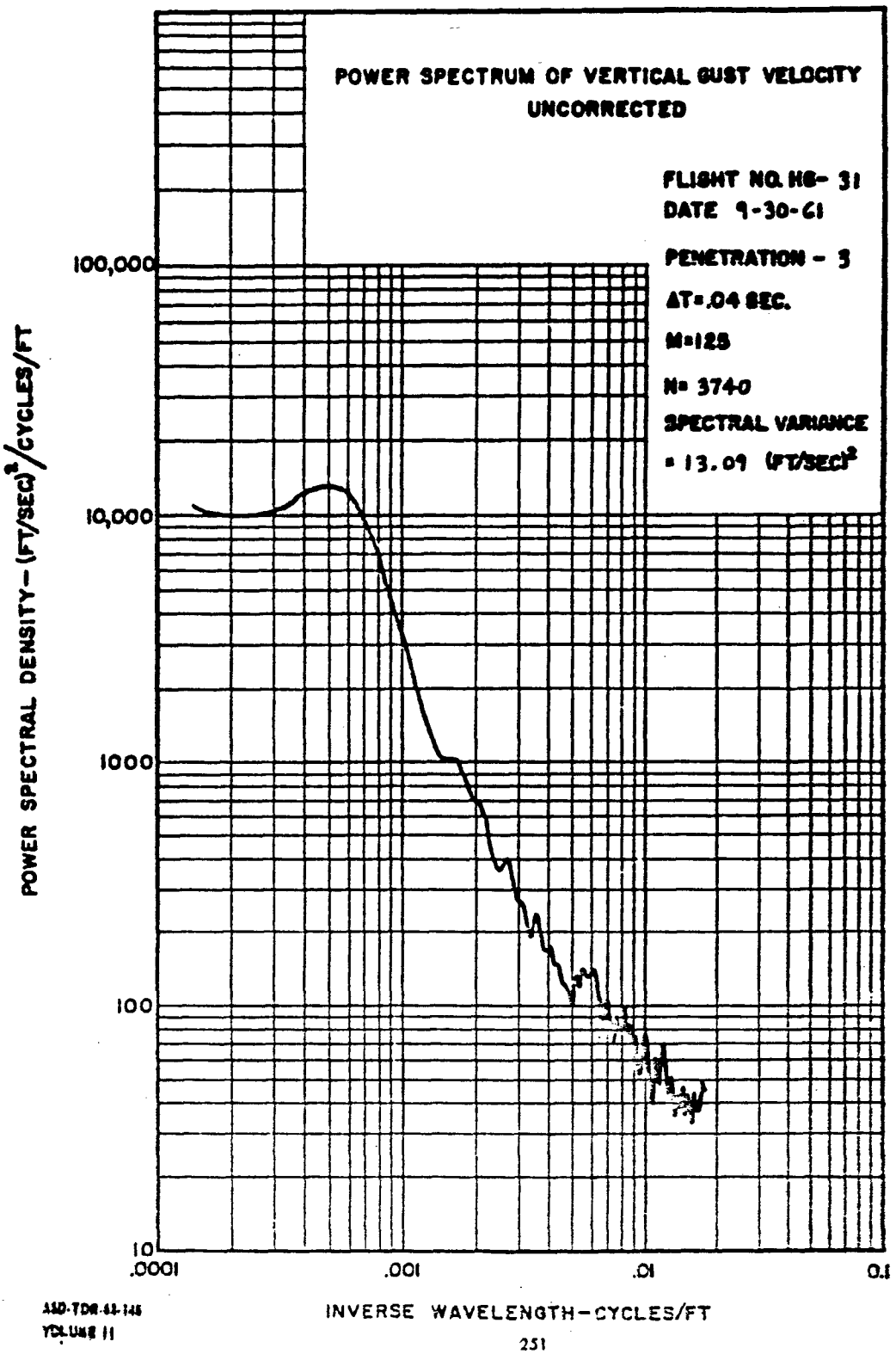


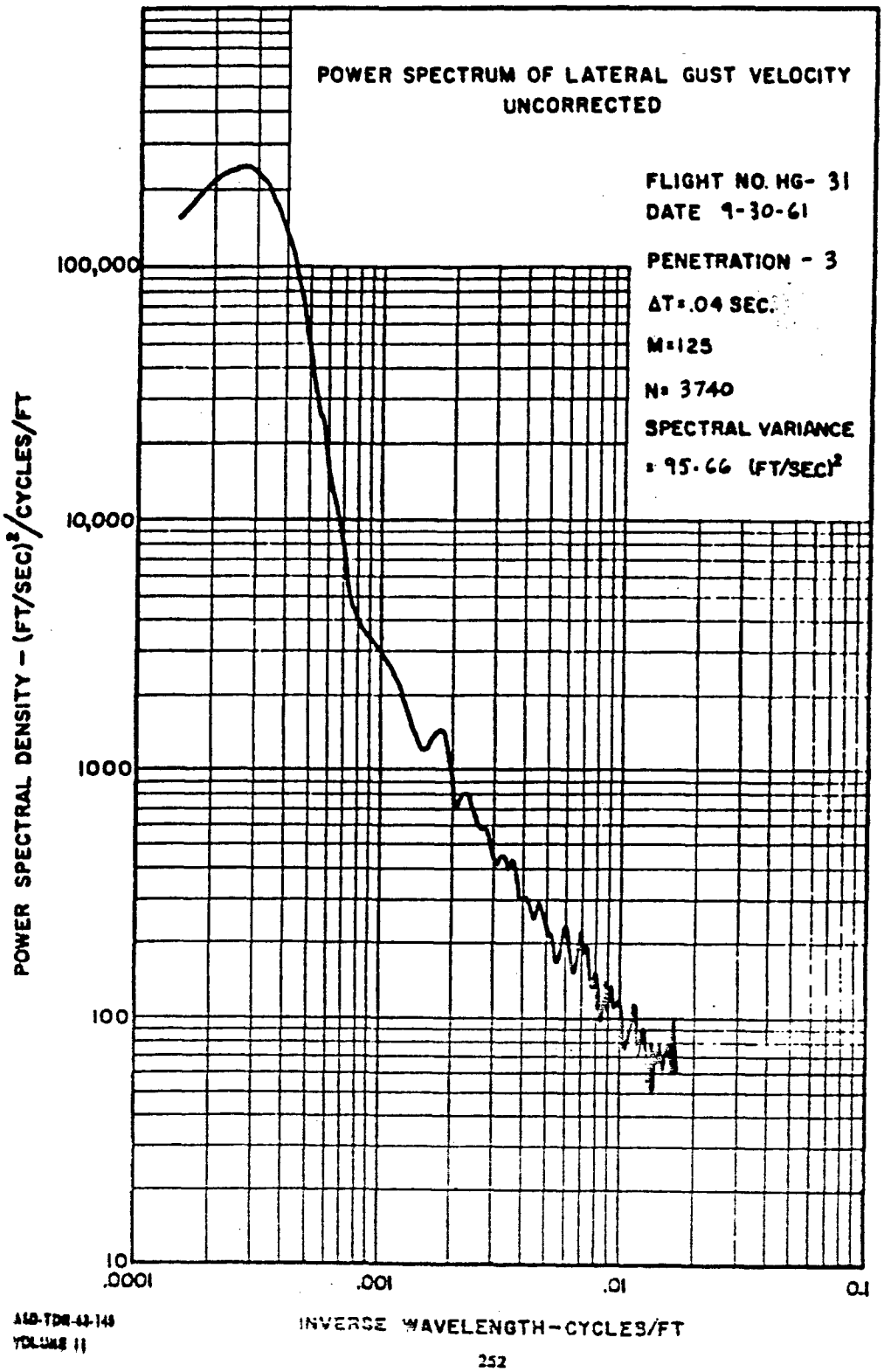
ASD-TDR-63-146
VOLUME II

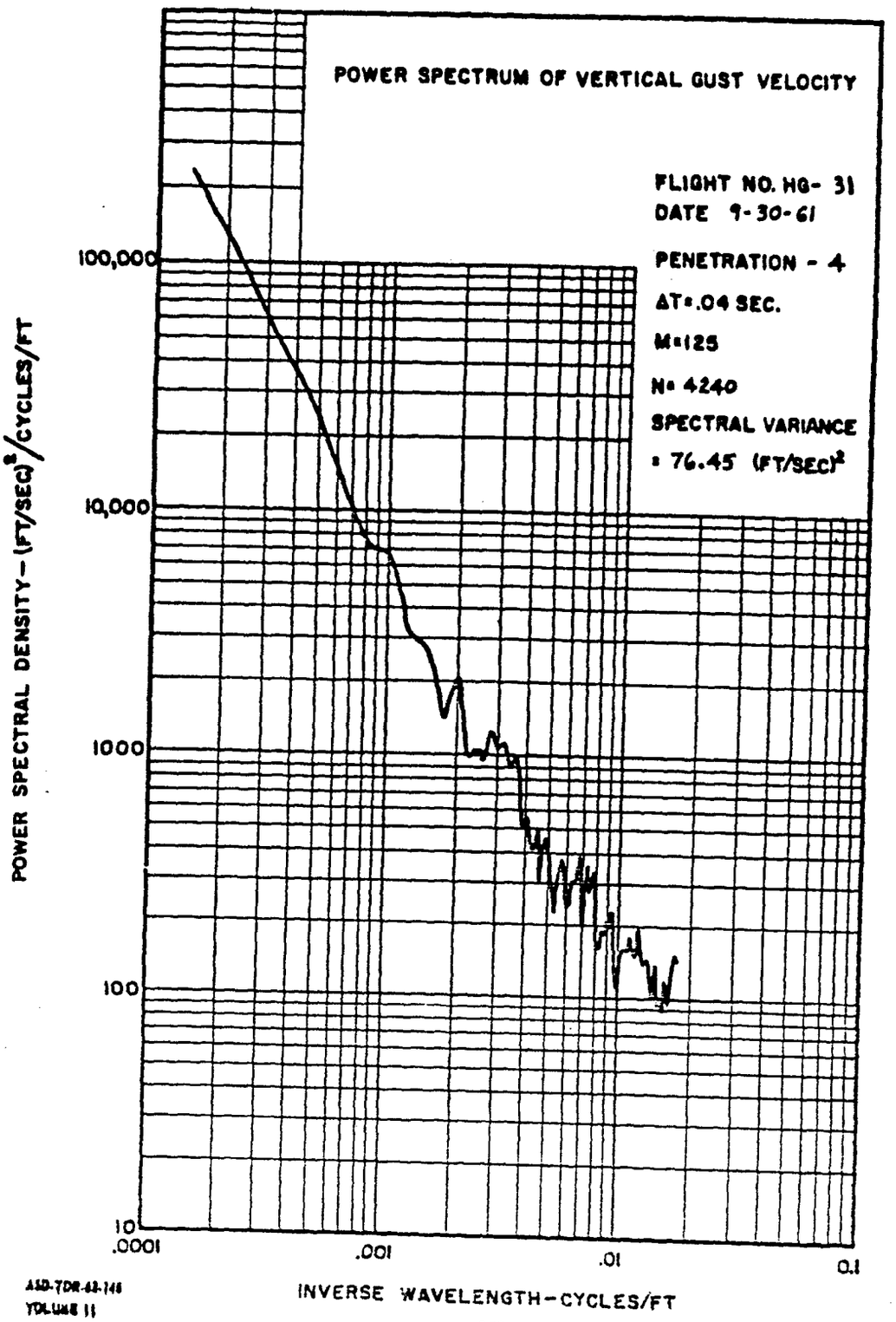

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 3740
SPECTRAL VARIANCE
= 15.90 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

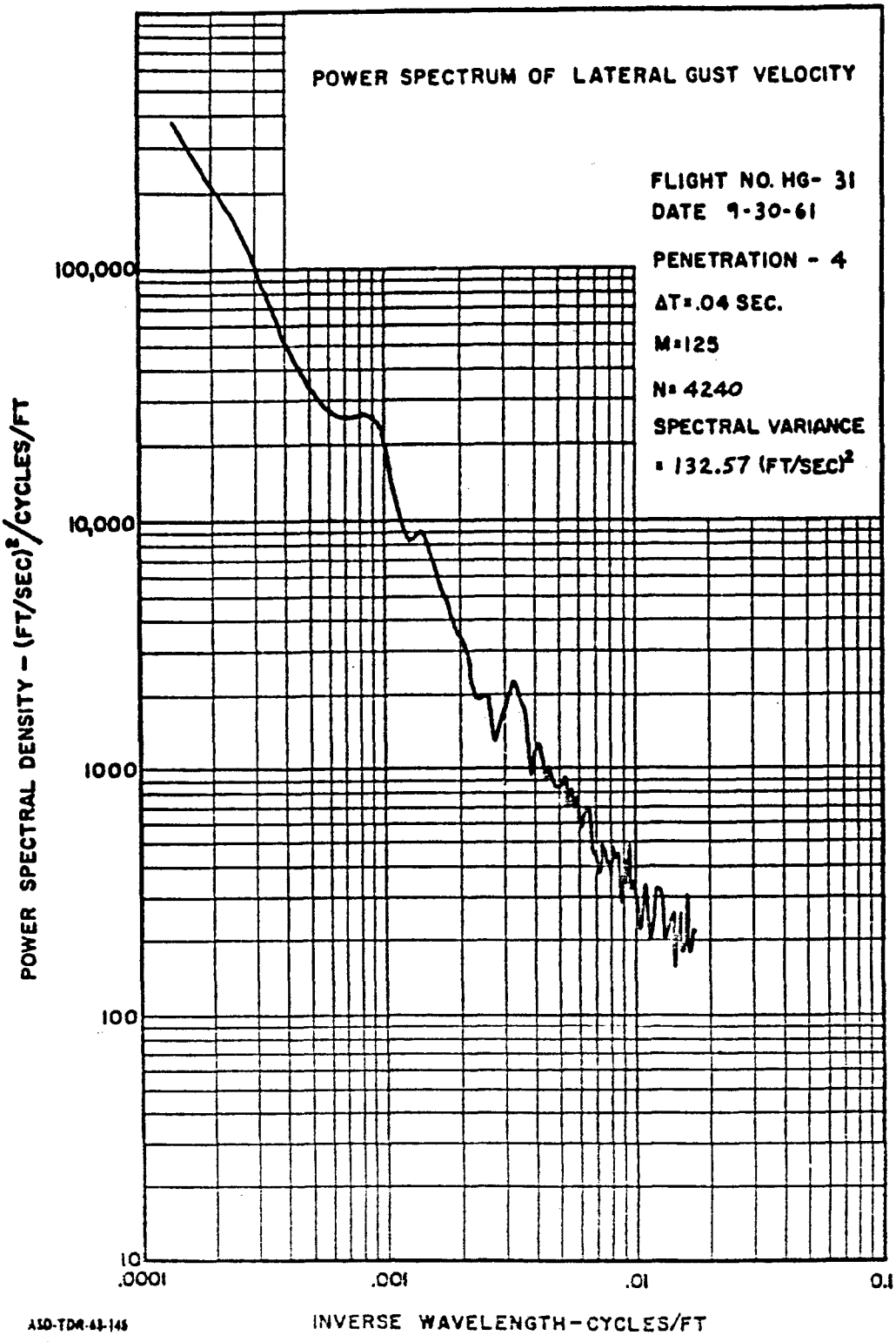

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 3740
SPECTRAL VARIANCE
= 23.93 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

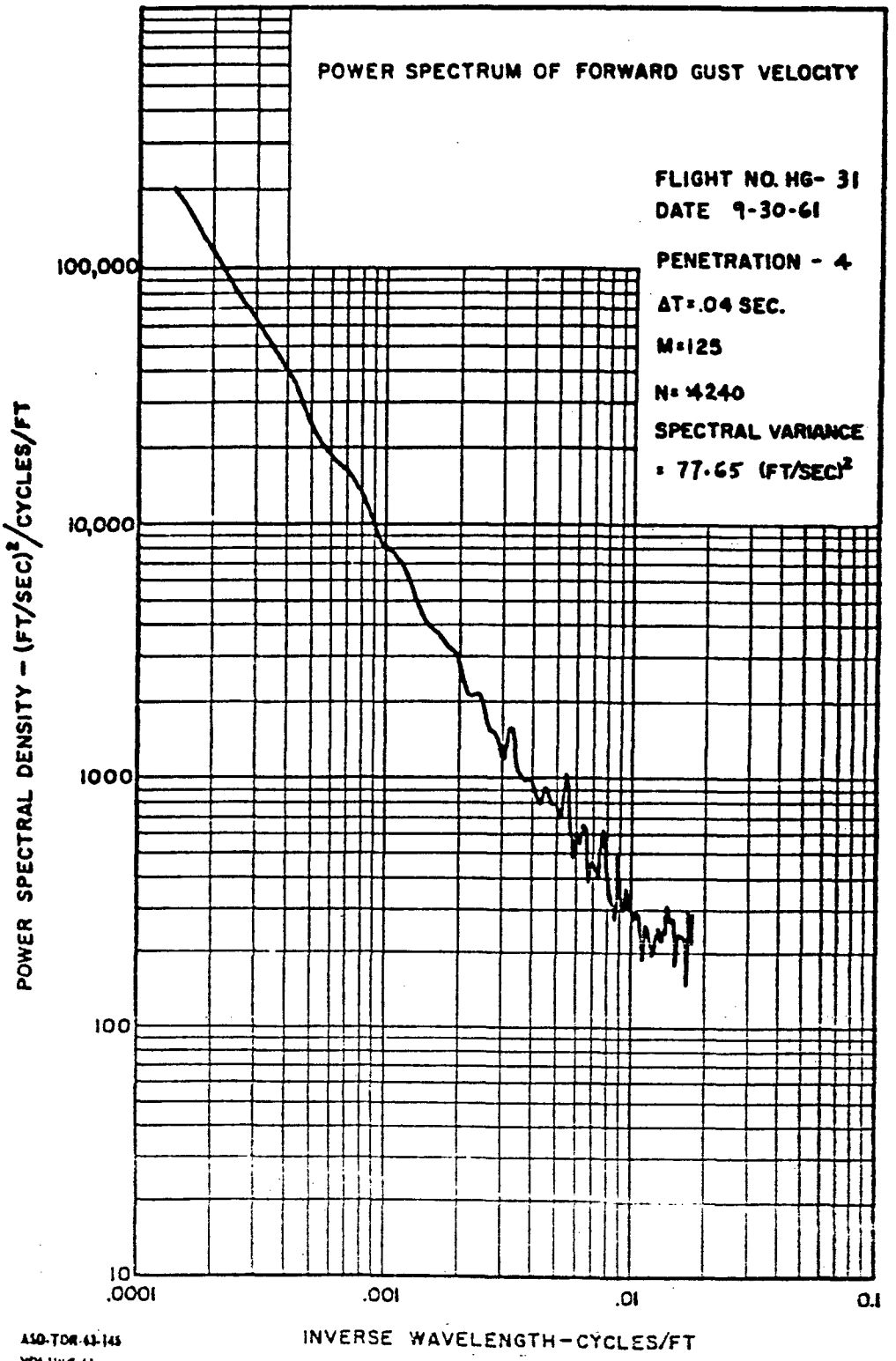

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 3740
SPECTRAL VARIANCE
= 20.70 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

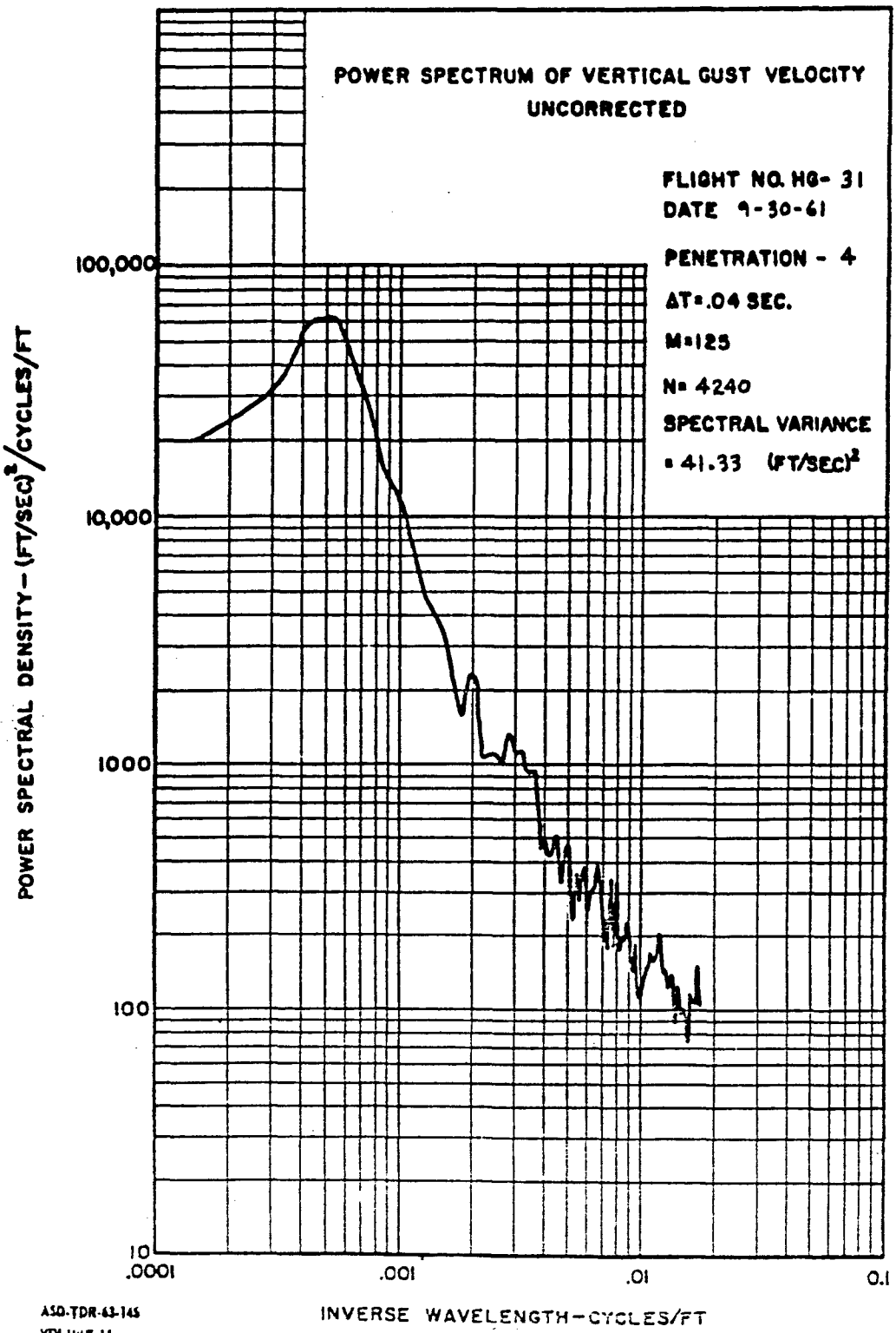

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HS- 31
DATE 9-30-61
PENETRATION - 3
ΔT=.04 SEC.
M=128
N= 3740
SPECTRAL VARIANCE
= 13.09 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

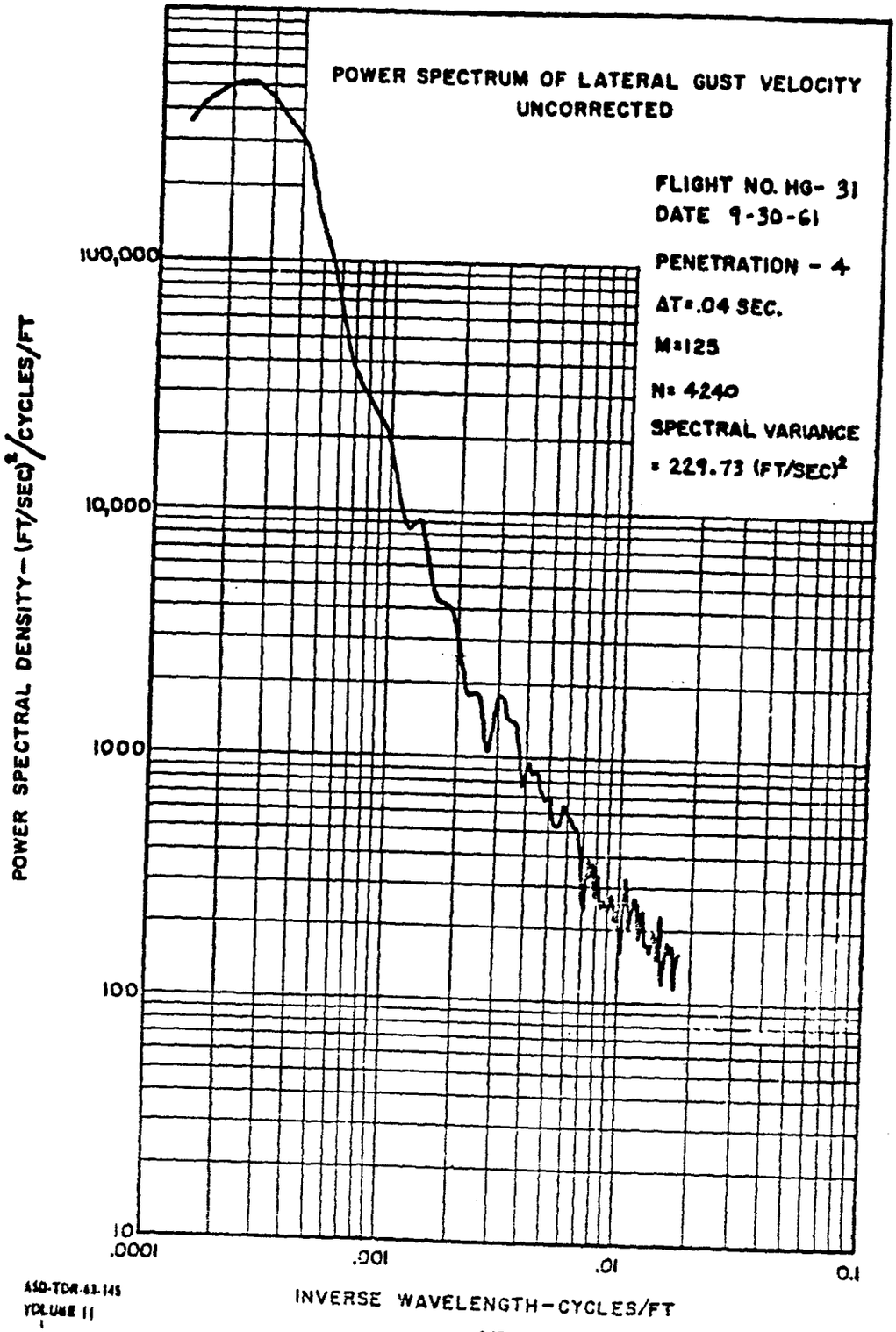

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 3740
SPECTRAL VARIANCE
= 95.66 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

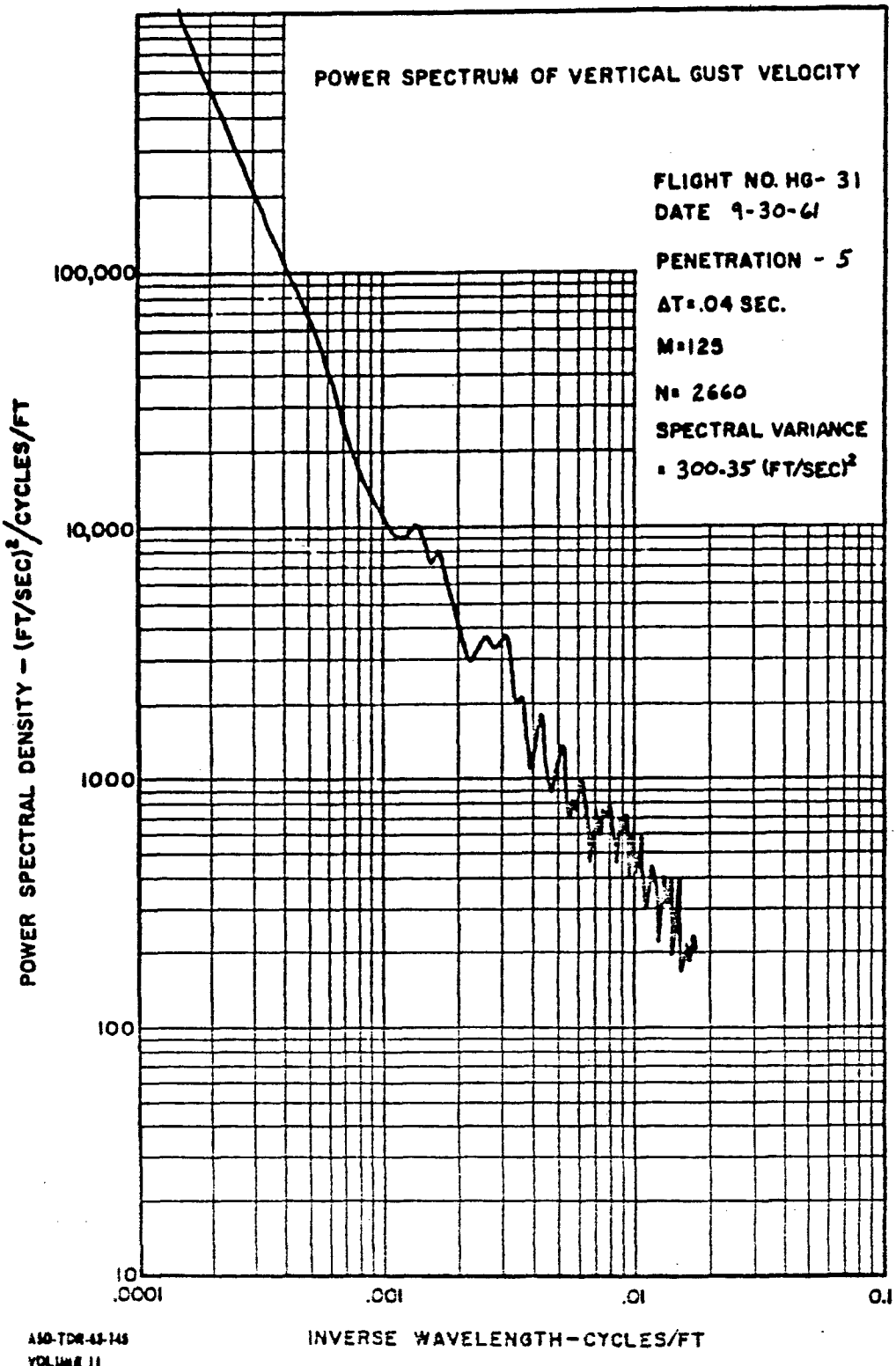

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 4240
SPECTRAL VARIANCE
= 76.45 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

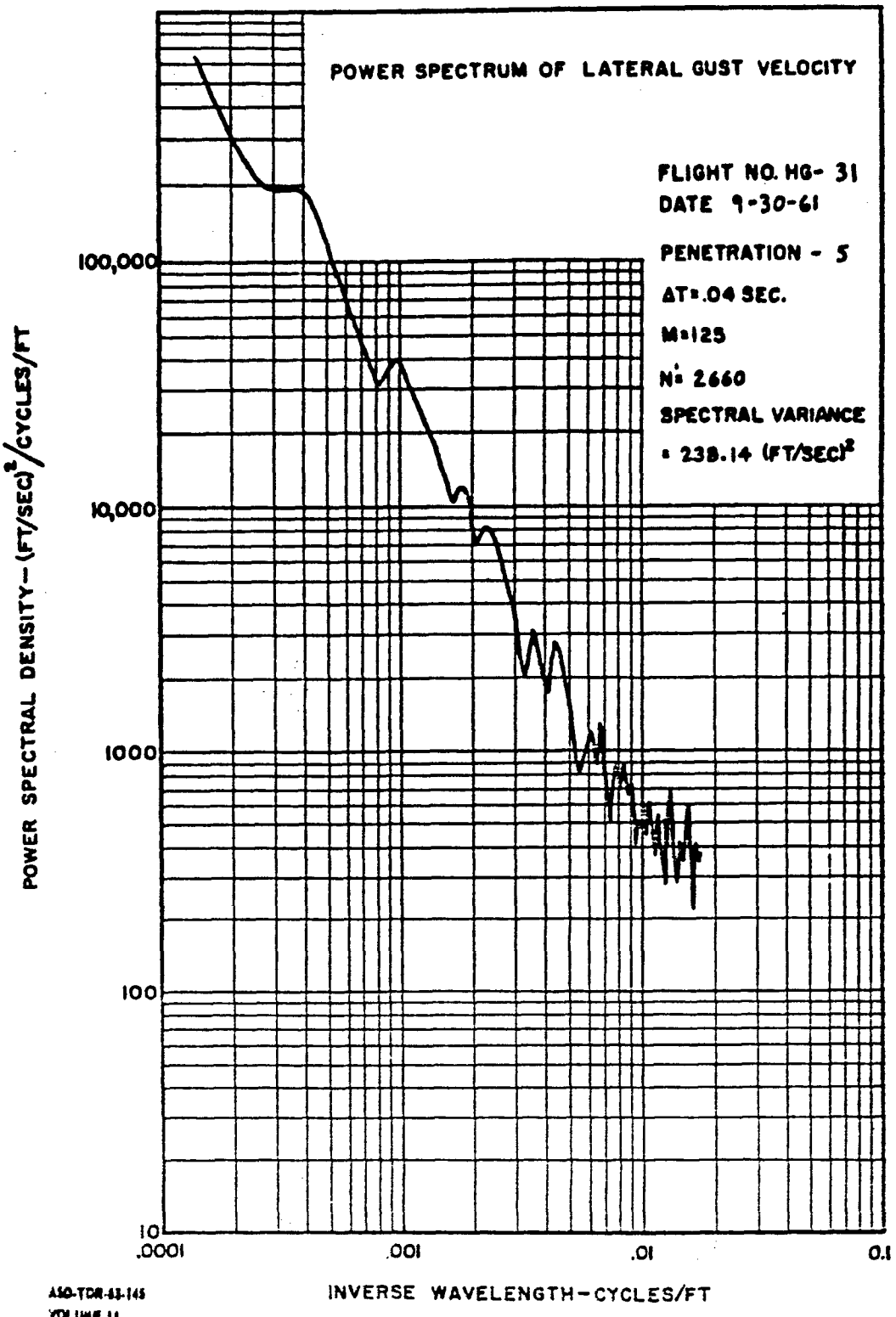

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N=4240
SPECTRAL VARIANCE
= 132.57 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

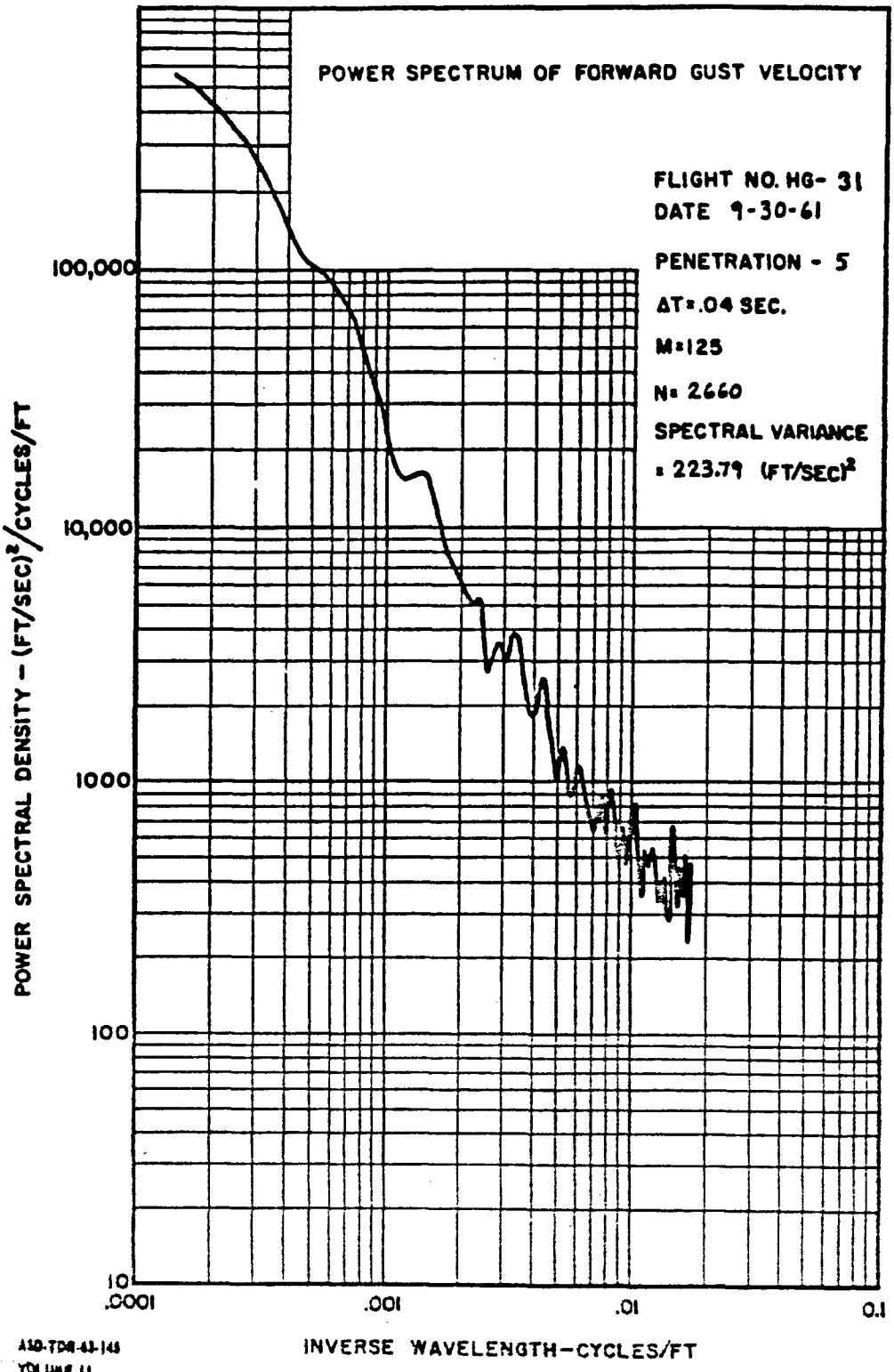

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N=4240
SPECTRAL VARIANCE
= 77.65 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

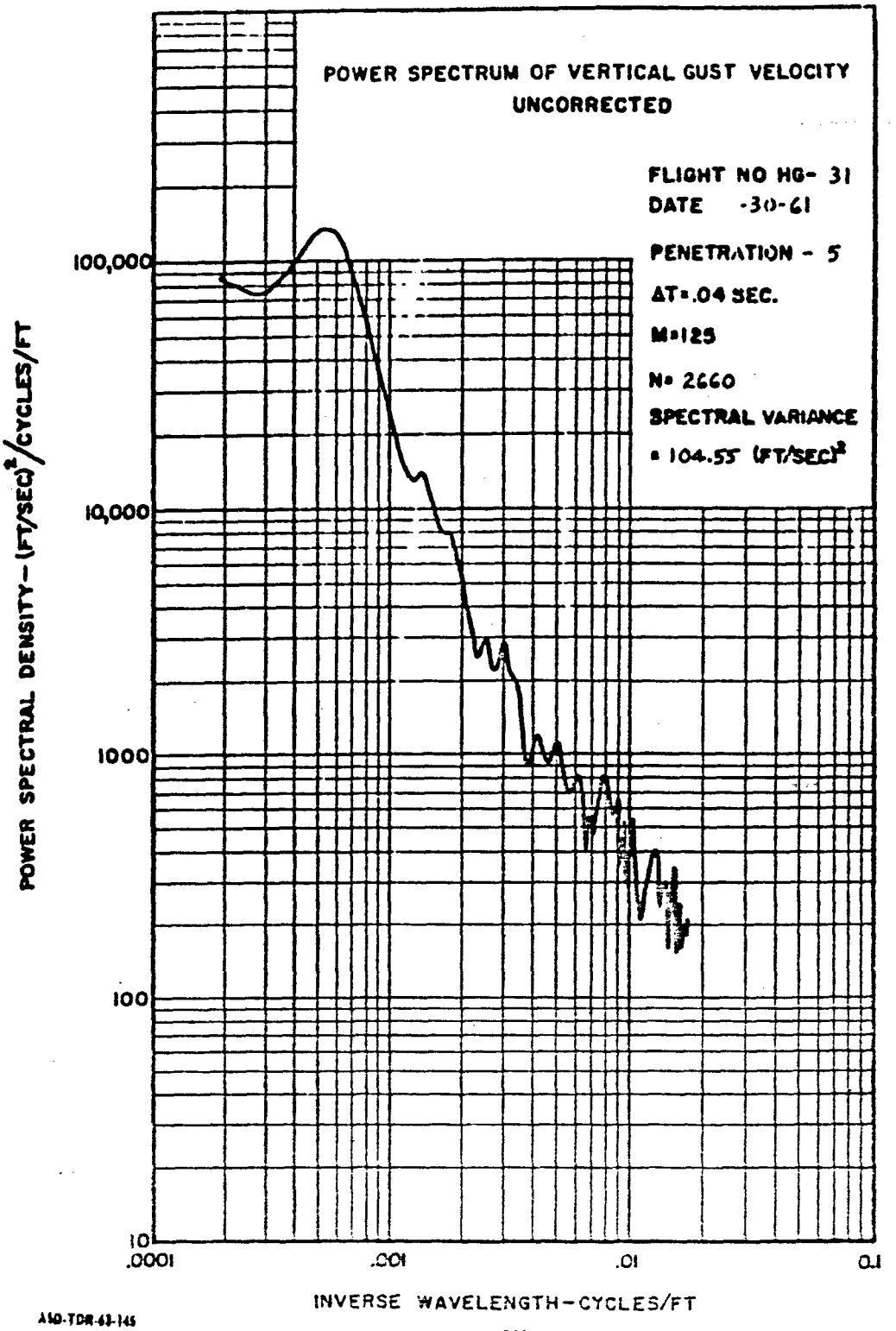

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 4240
SPECTRAL VARIANCE
= 41.33 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

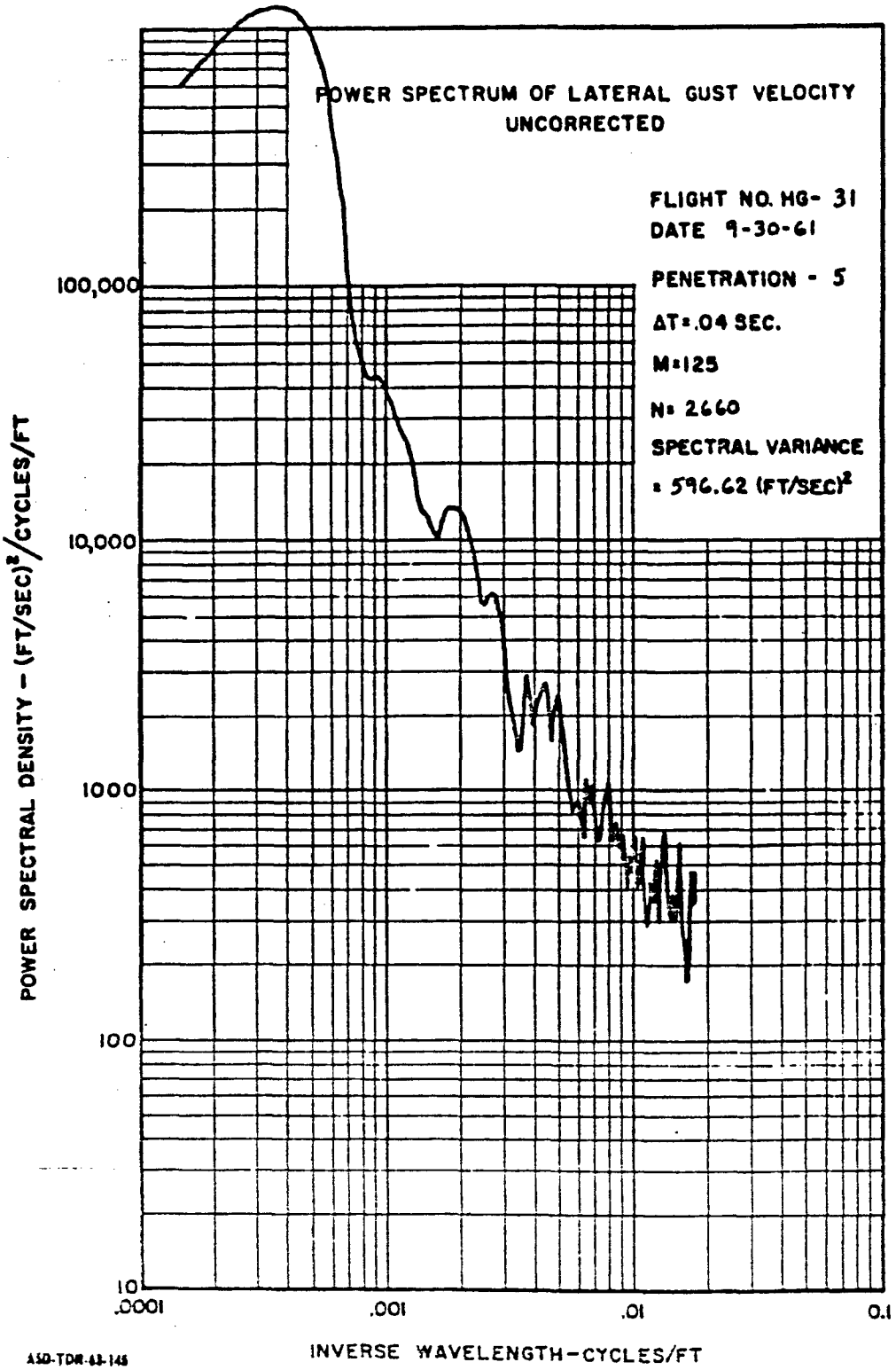

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 4240
SPECTRAL VARIANCE
= 229.73 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

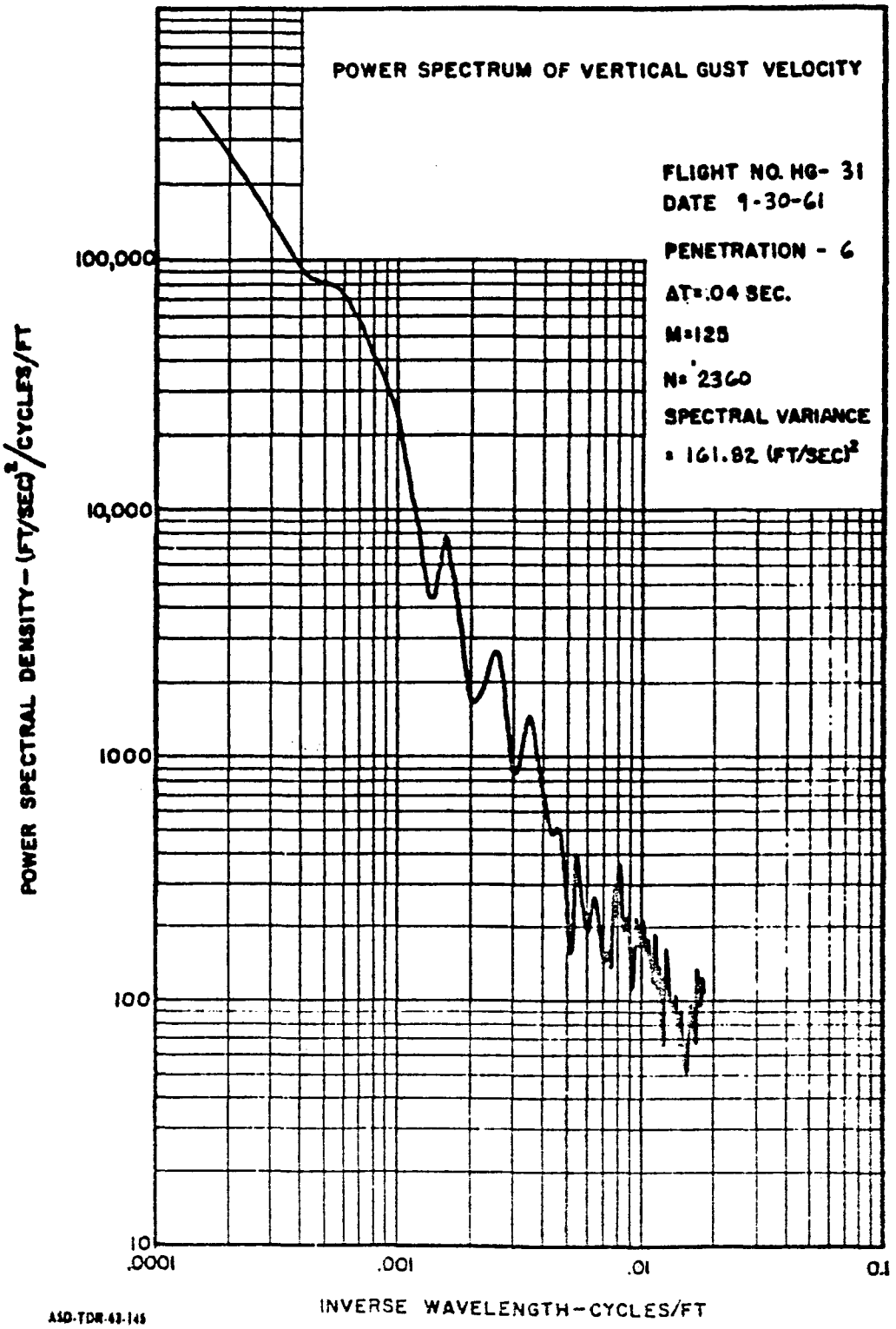

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 2660
SPECTRAL VARIANCE
= 300.35 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

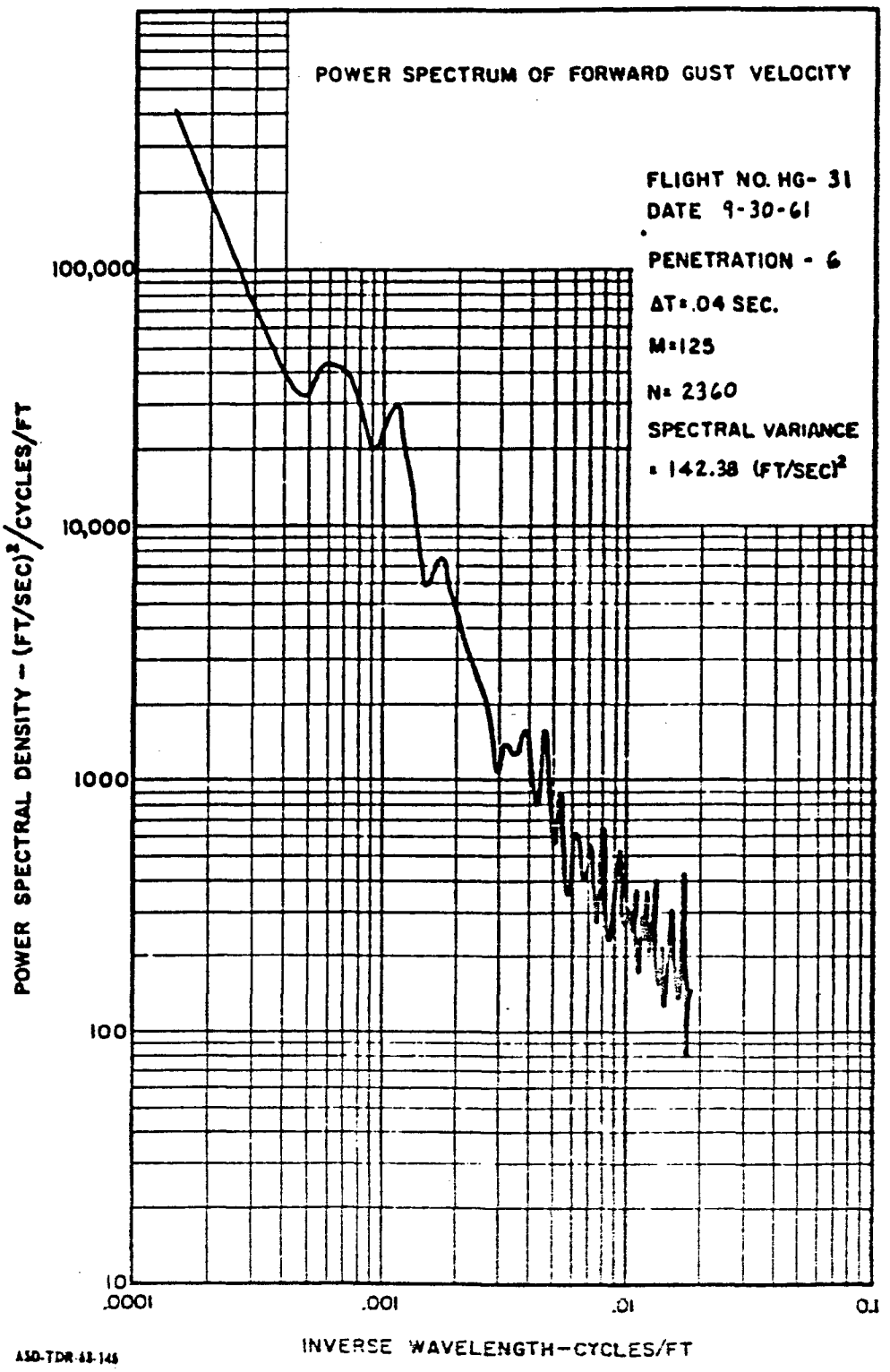

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 2660
SPECTRAL VARIANCE
= 238.14 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

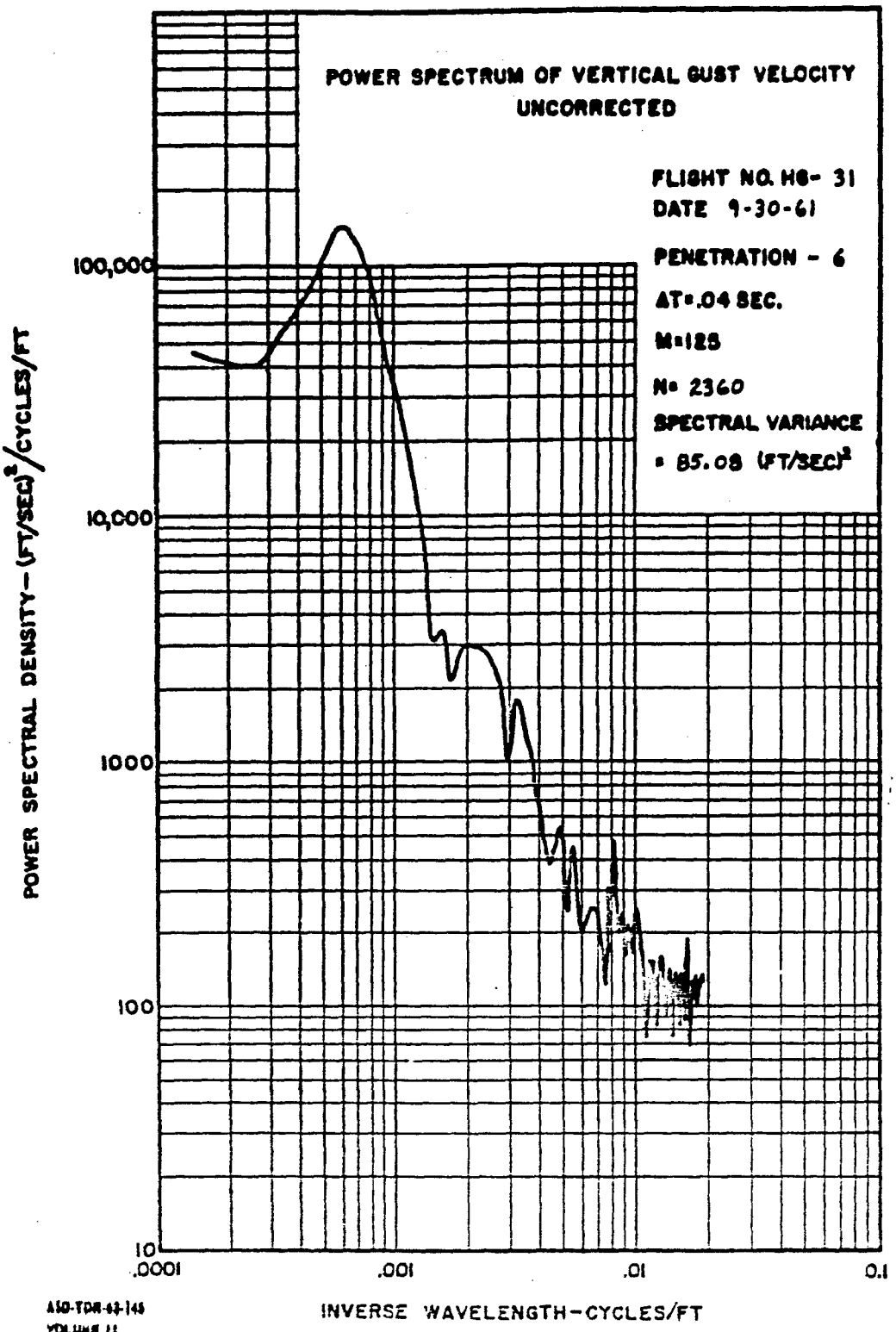

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 2660
SPECTRAL VARIANCE
= 223.79 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

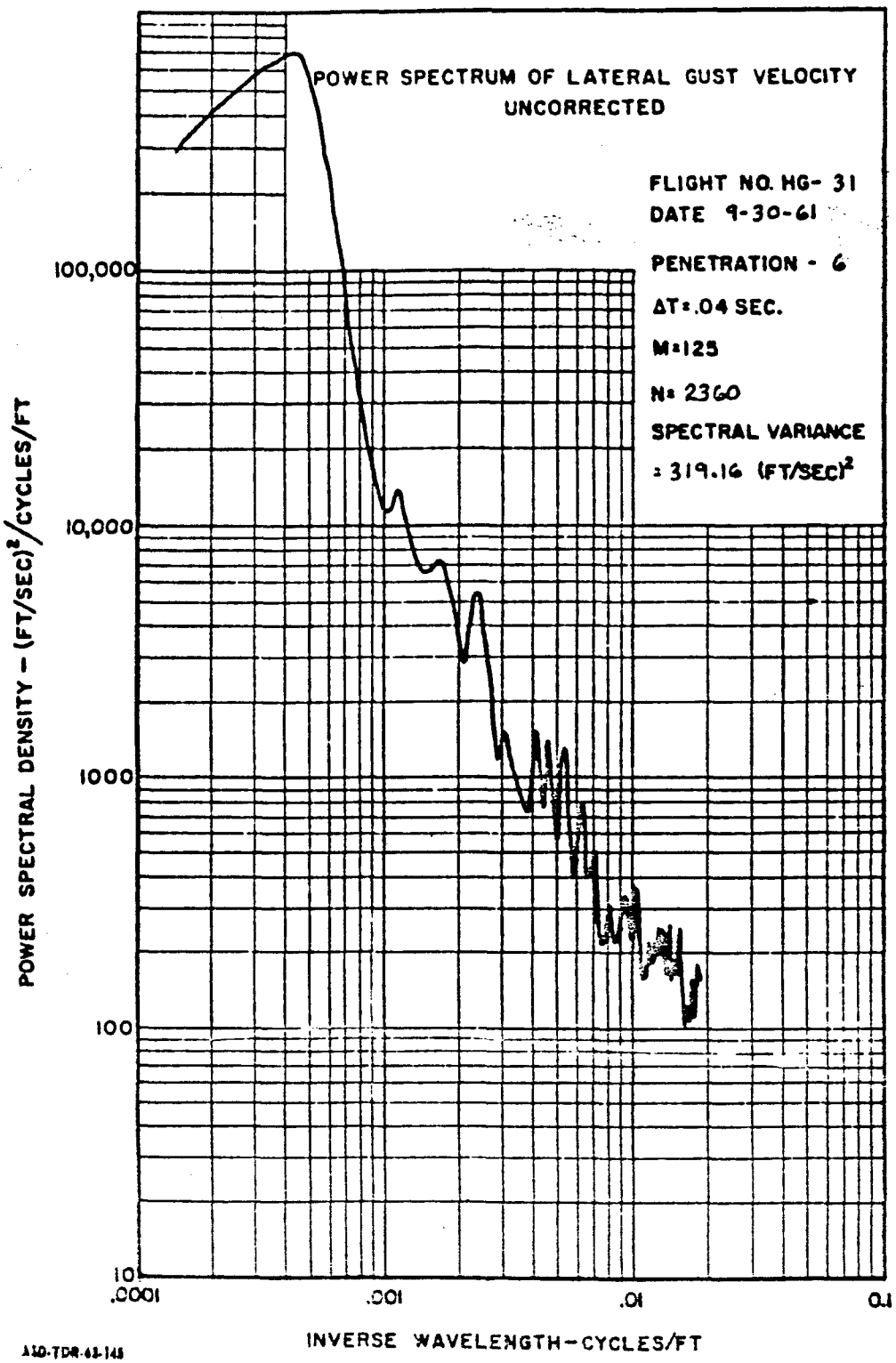

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO HG- 31
DATE -30-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 2660
SPECTRAL VARIANCE
= 104.55 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

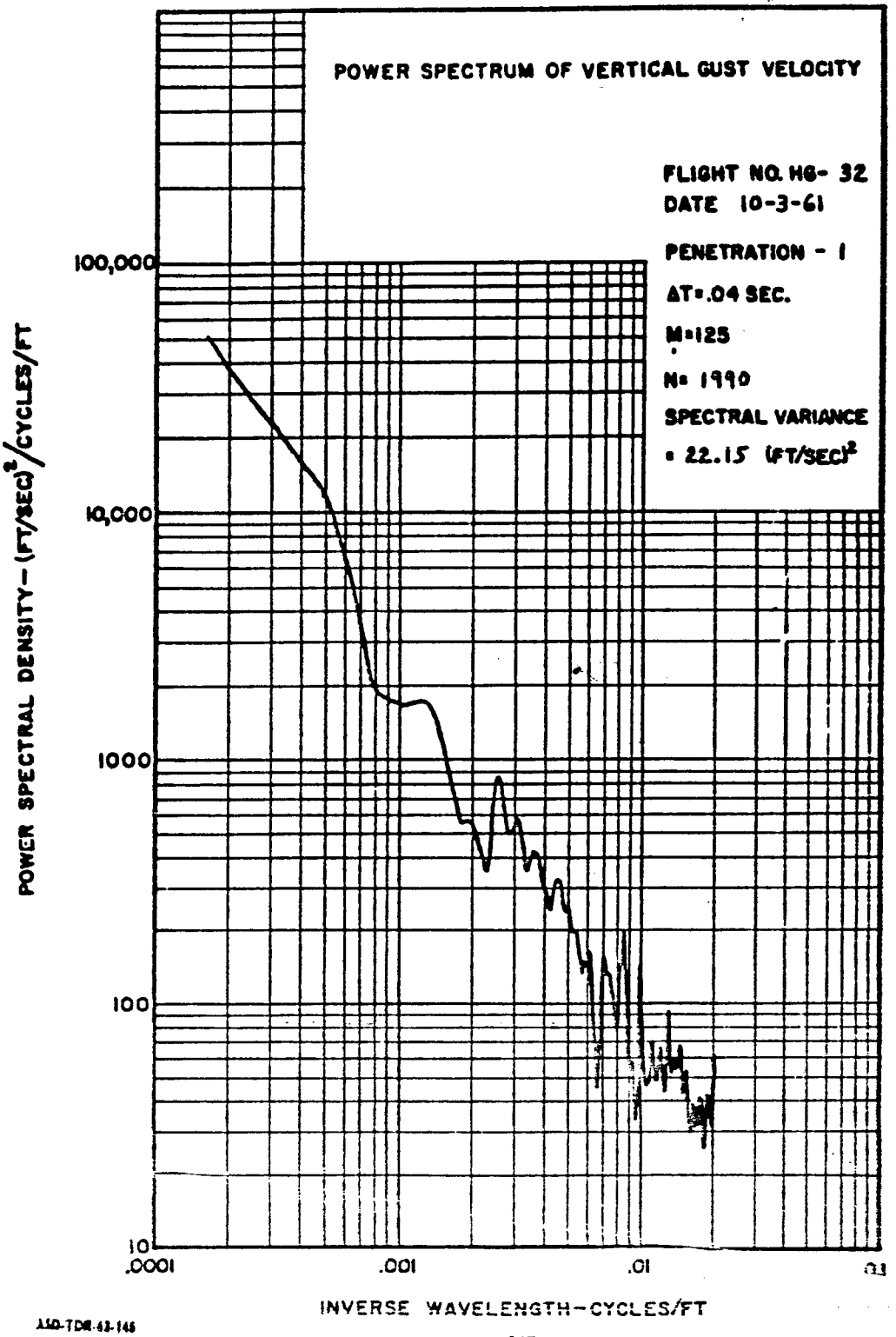

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 2660
SPECTRAL VARIANCE
= 596.62 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

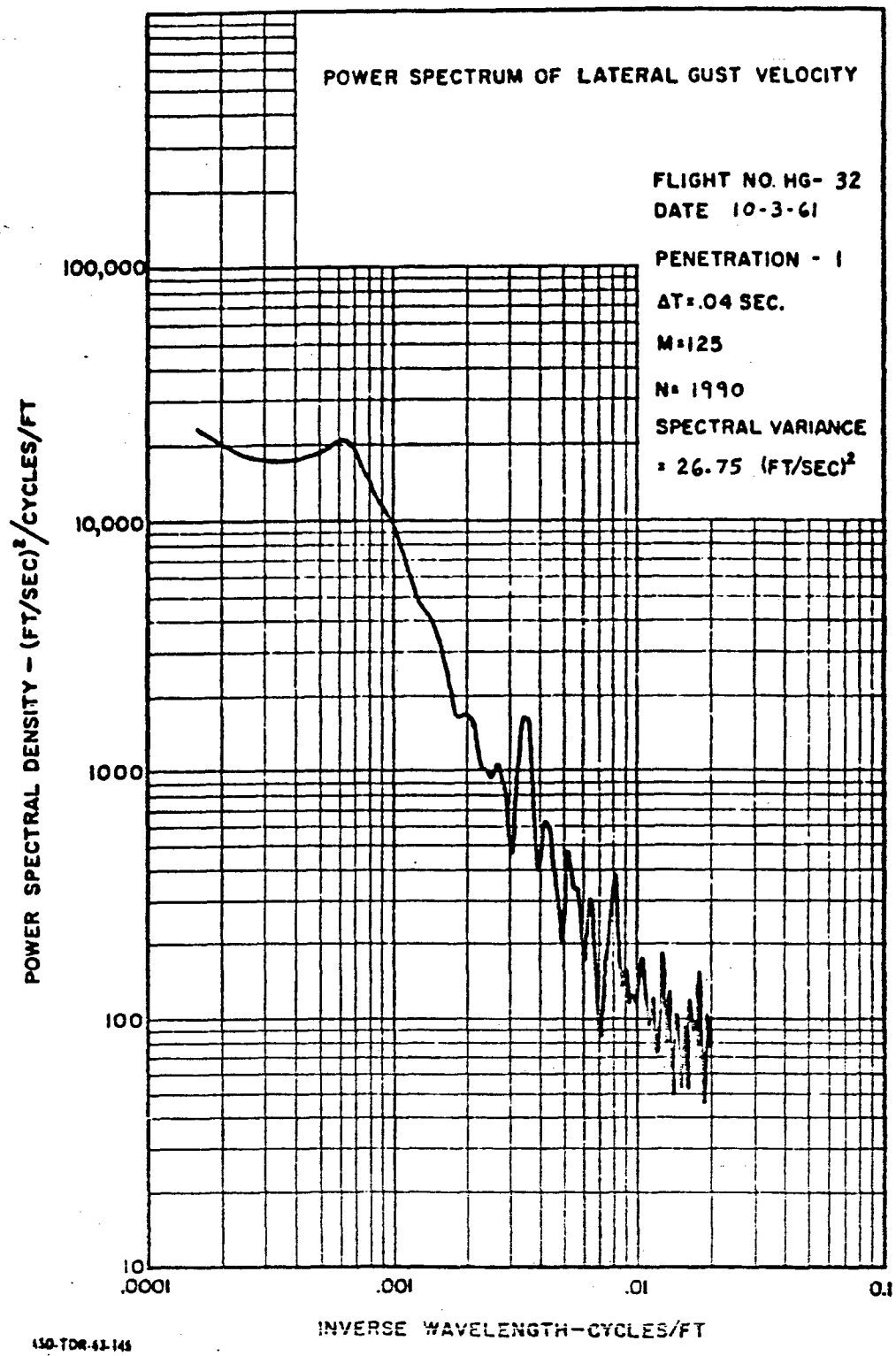

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 6
ΔT=.04 SEC.
M=128
N= 2360
SPECTRAL VARIANCE
= 161.82 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

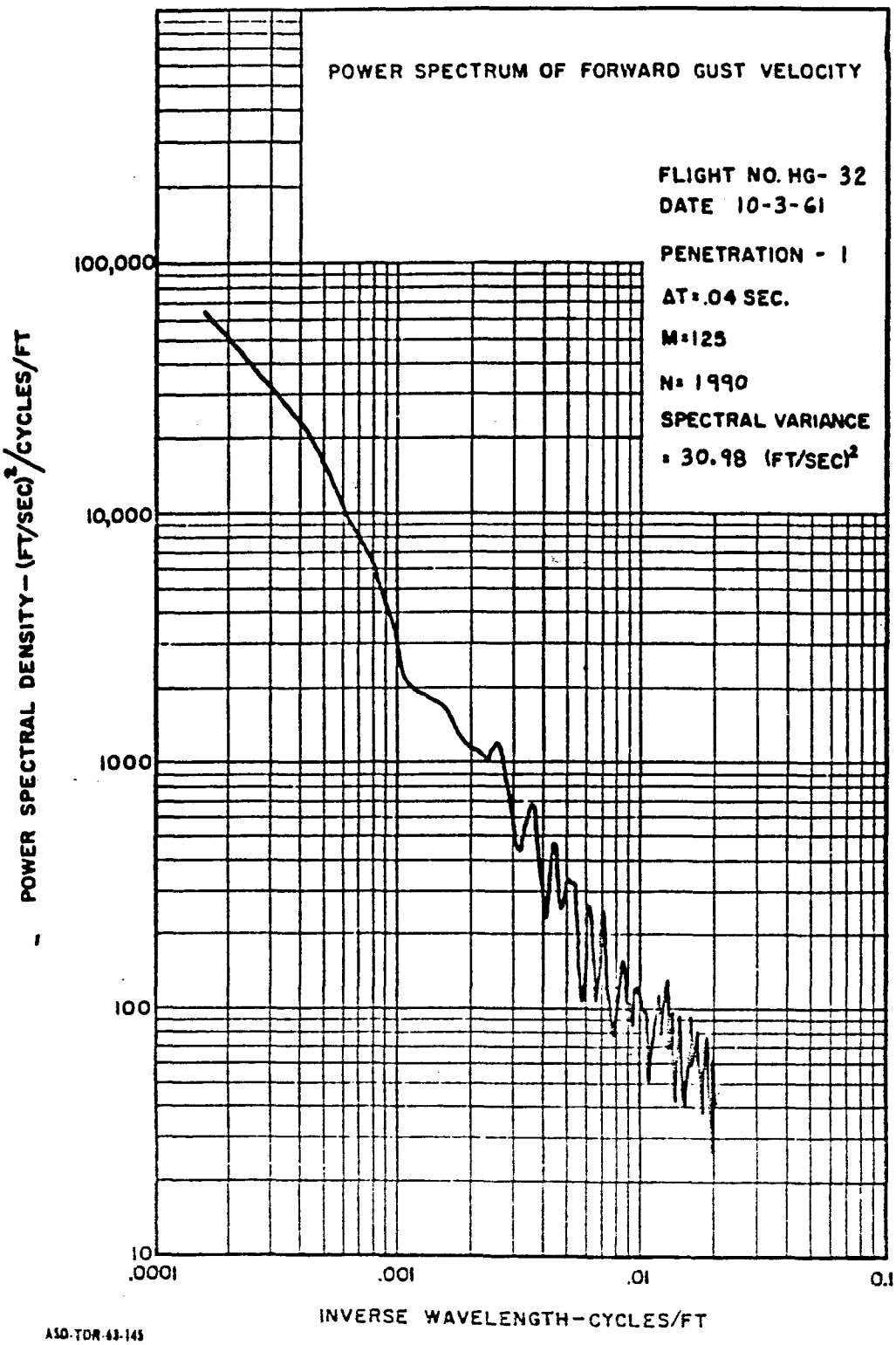

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2360
SPECTRAL VARIANCE
= 142.38 (FT/SEC)²
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH–CYCLES/FT

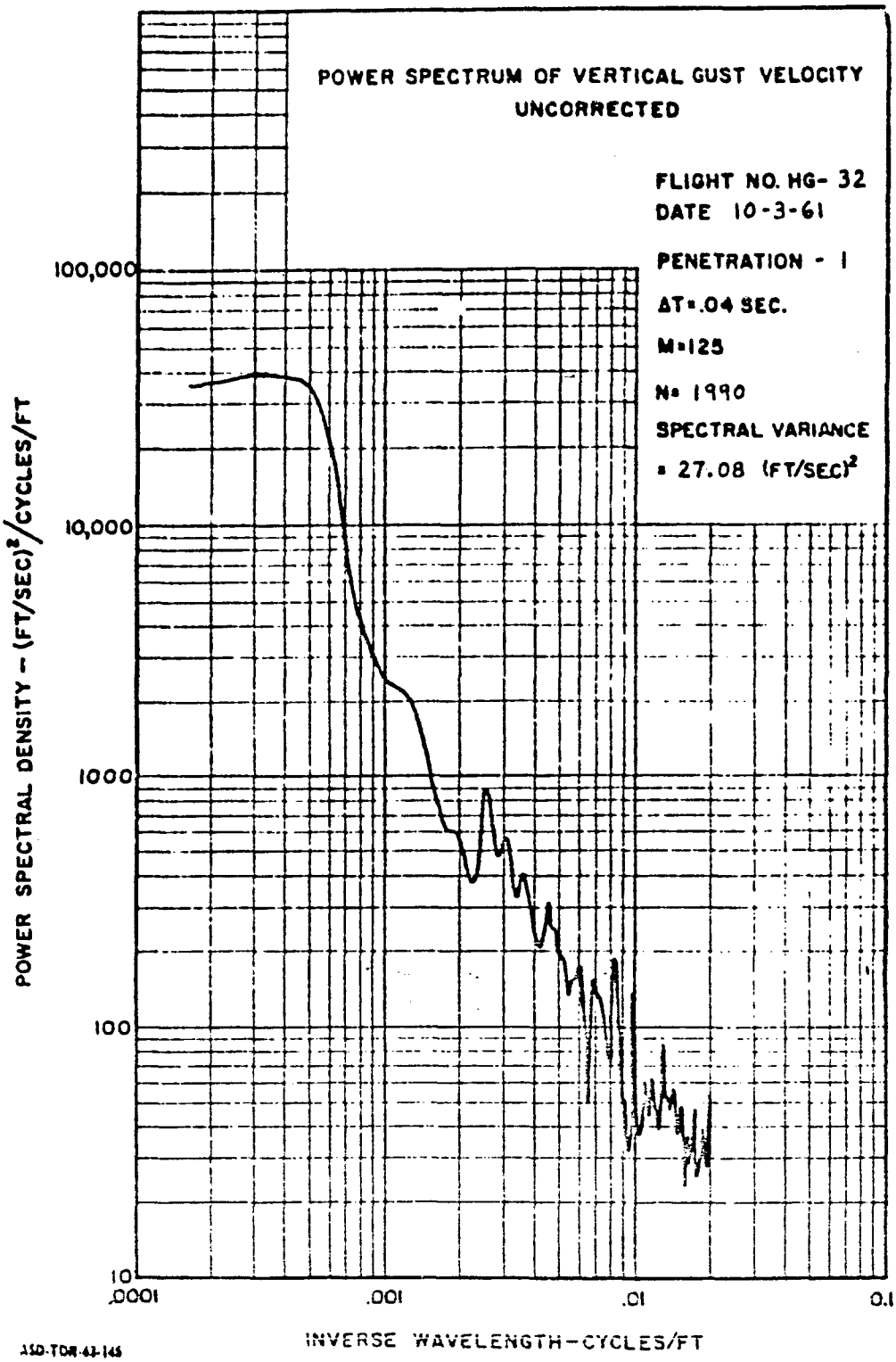

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. H6- 31
DATE 9-30-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2360
SPECTRAL VARIANCE
= 85.08 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

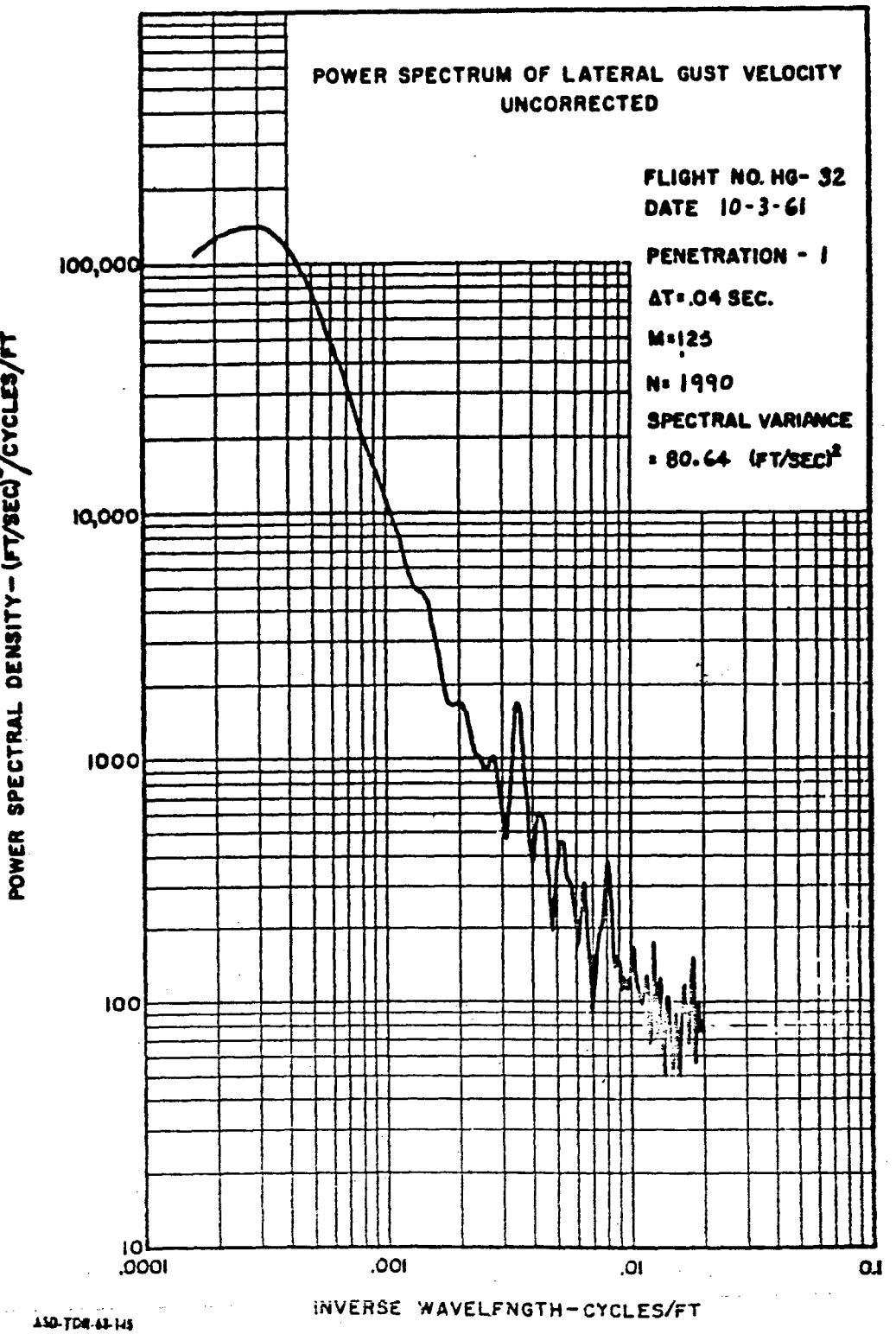

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 31
DATE 9-30-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2360
SPECTRAL VARIANCE
= 319.16 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH – CYCLES/FT

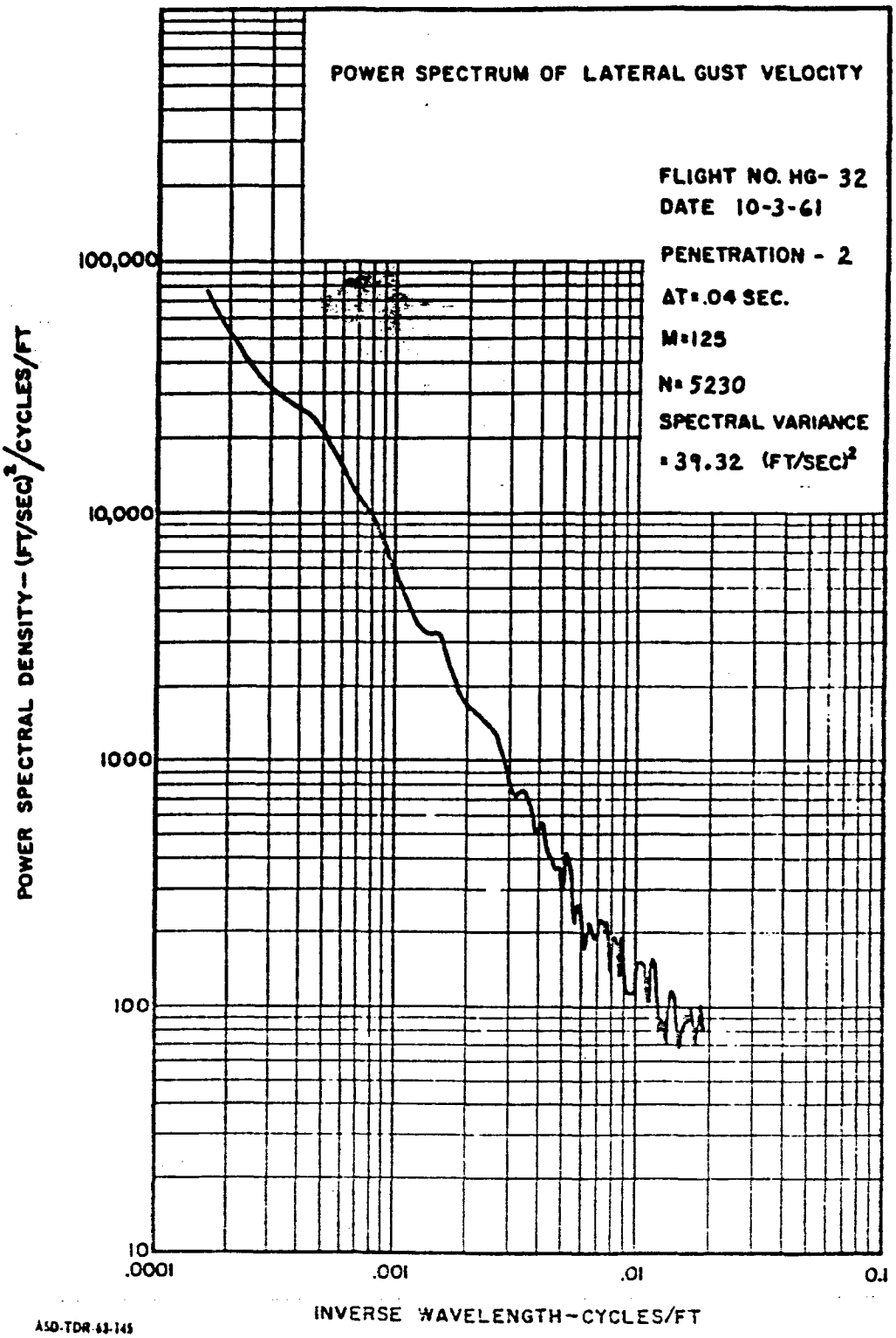

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 22.15 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
INVERSE WAVELENGTH-CYCLES/FT

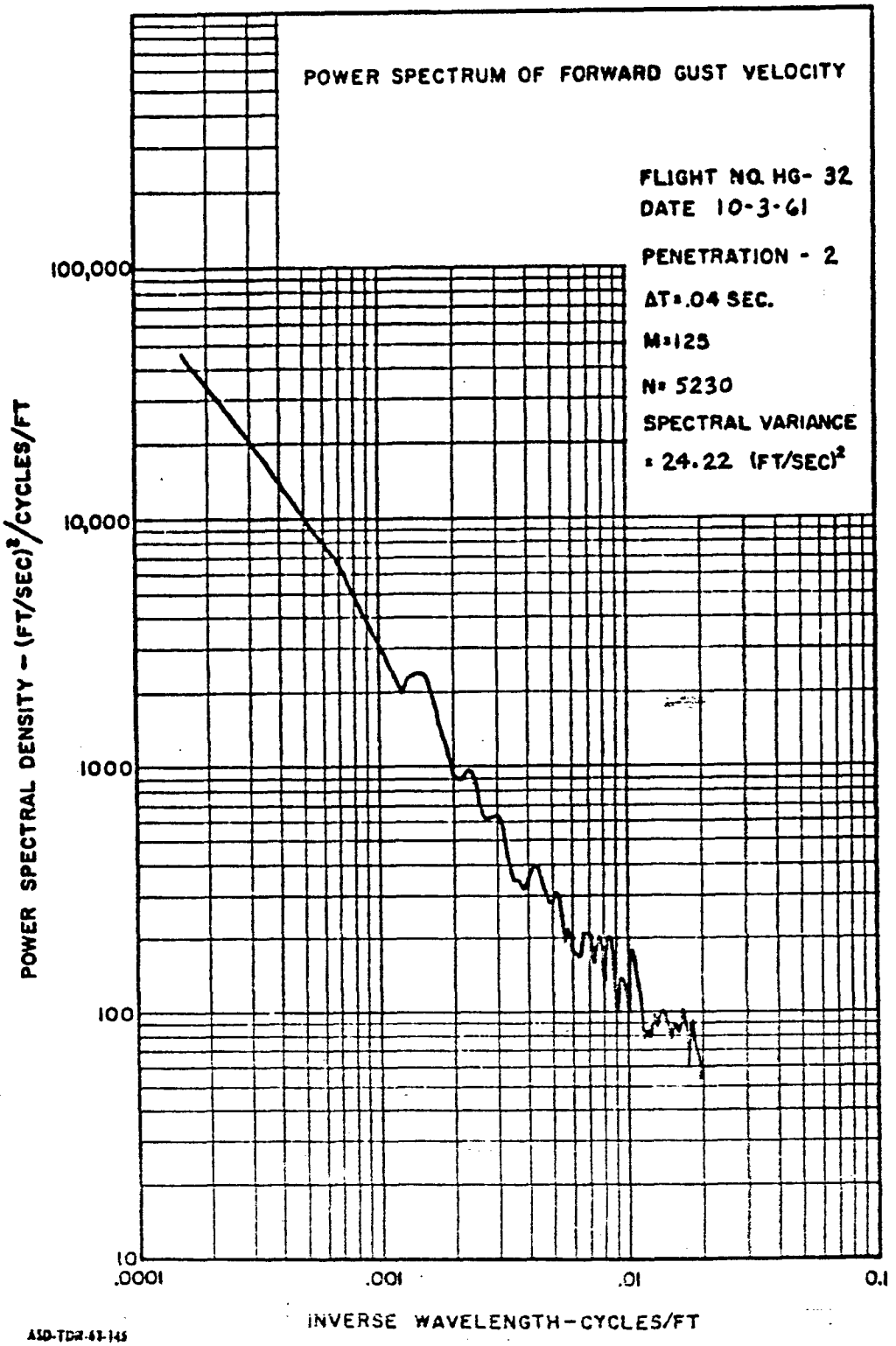

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 26.75 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

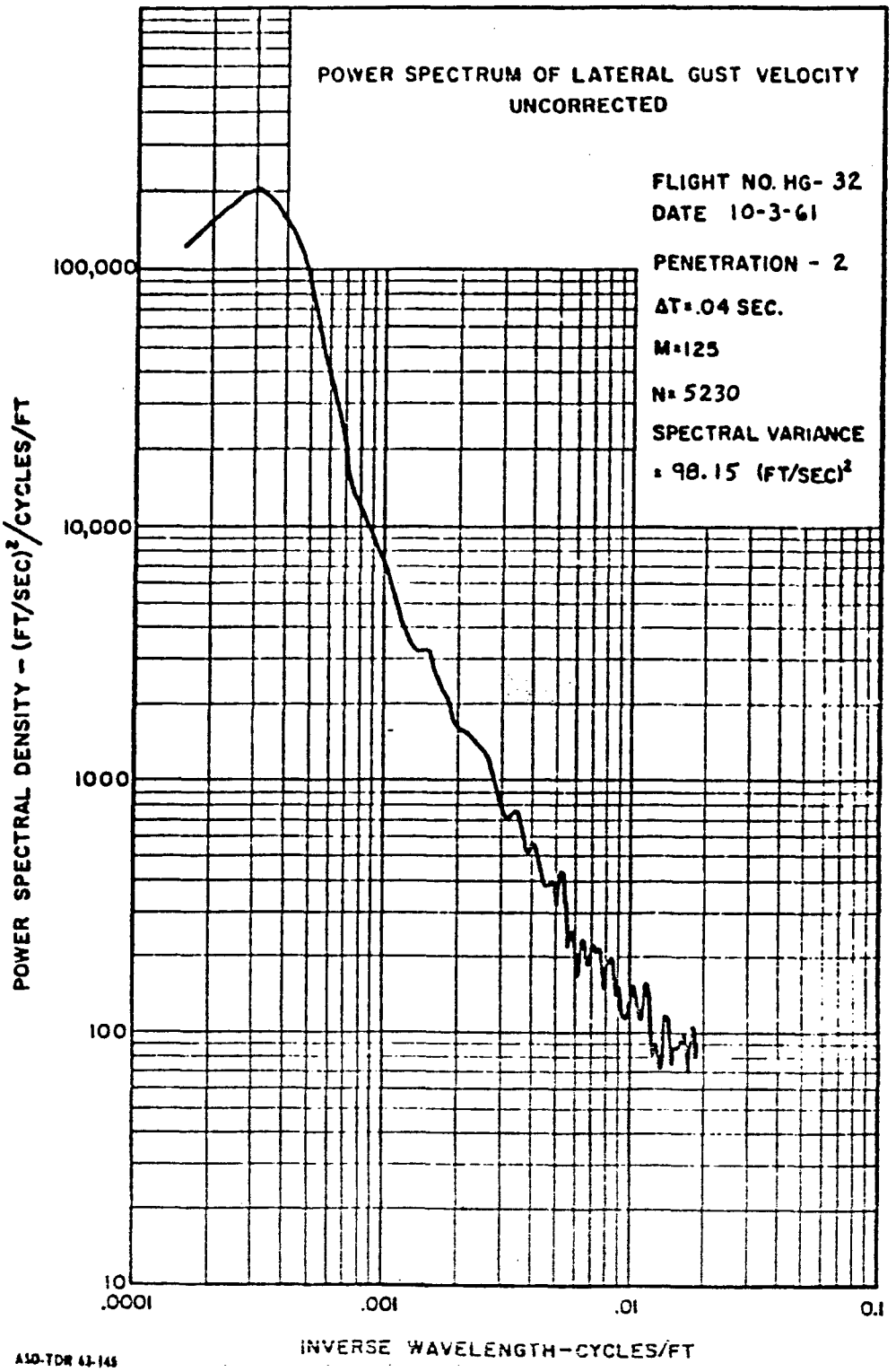

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 30.98 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

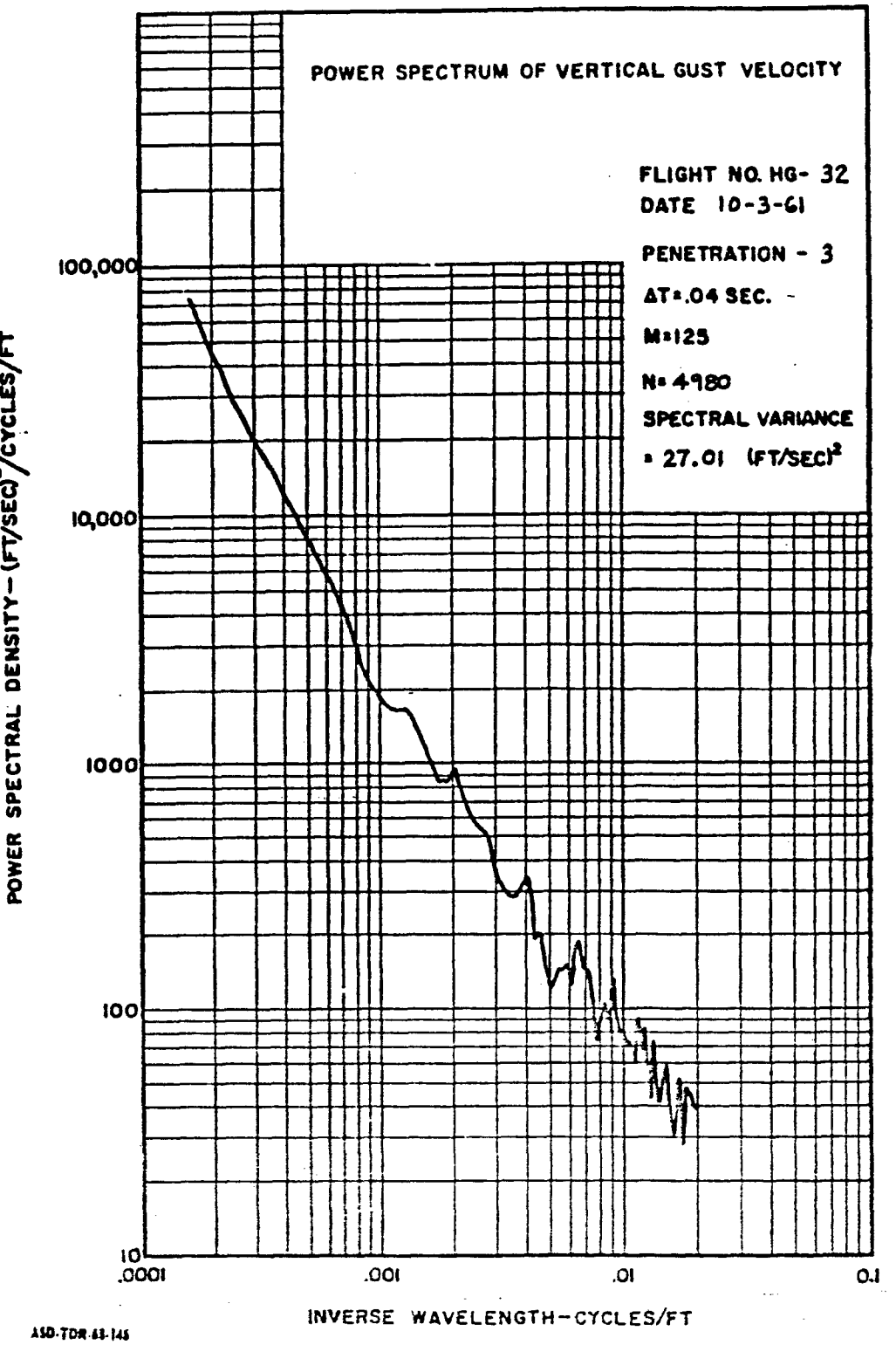

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 27.08 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

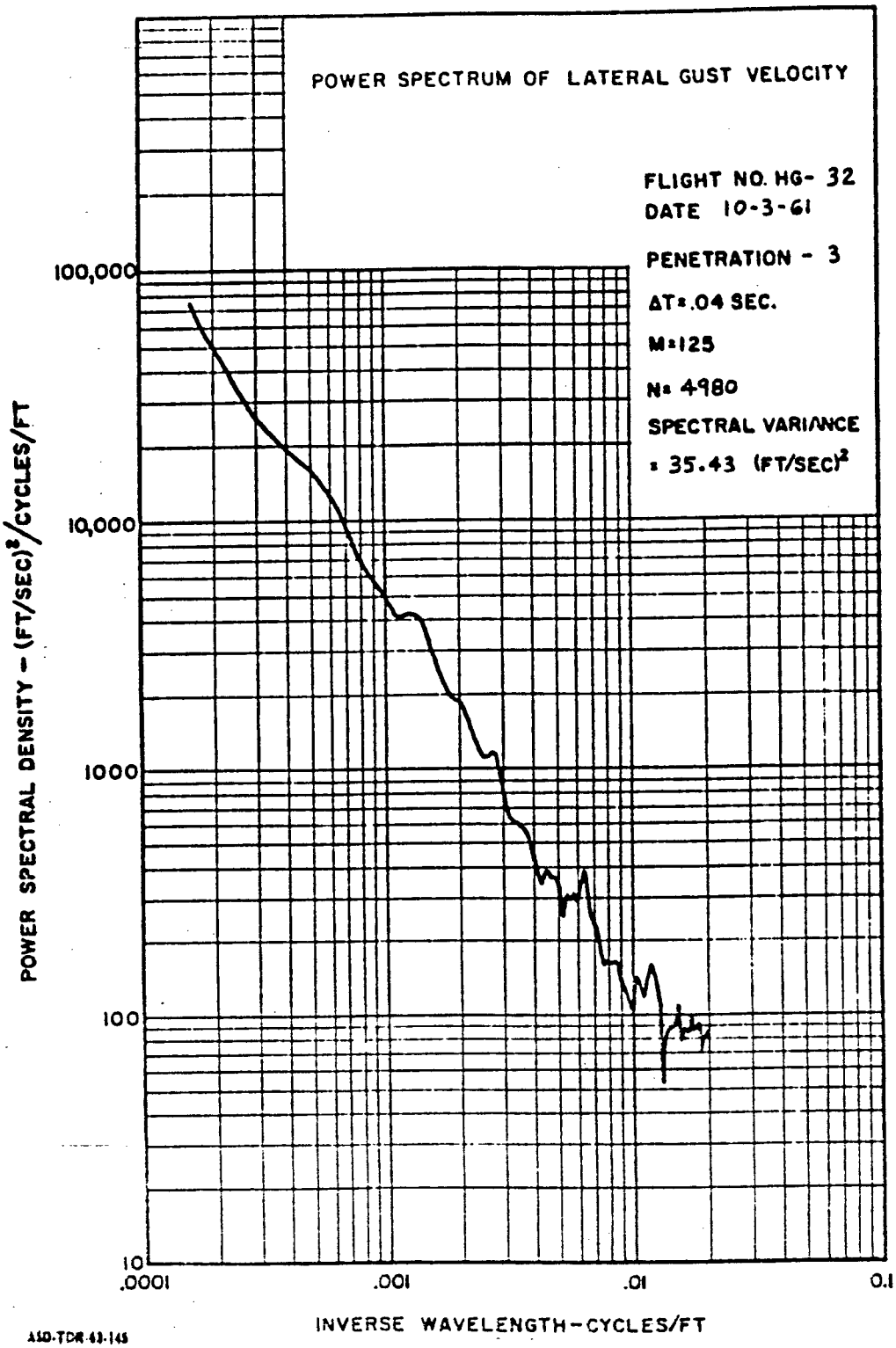

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 80.64 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

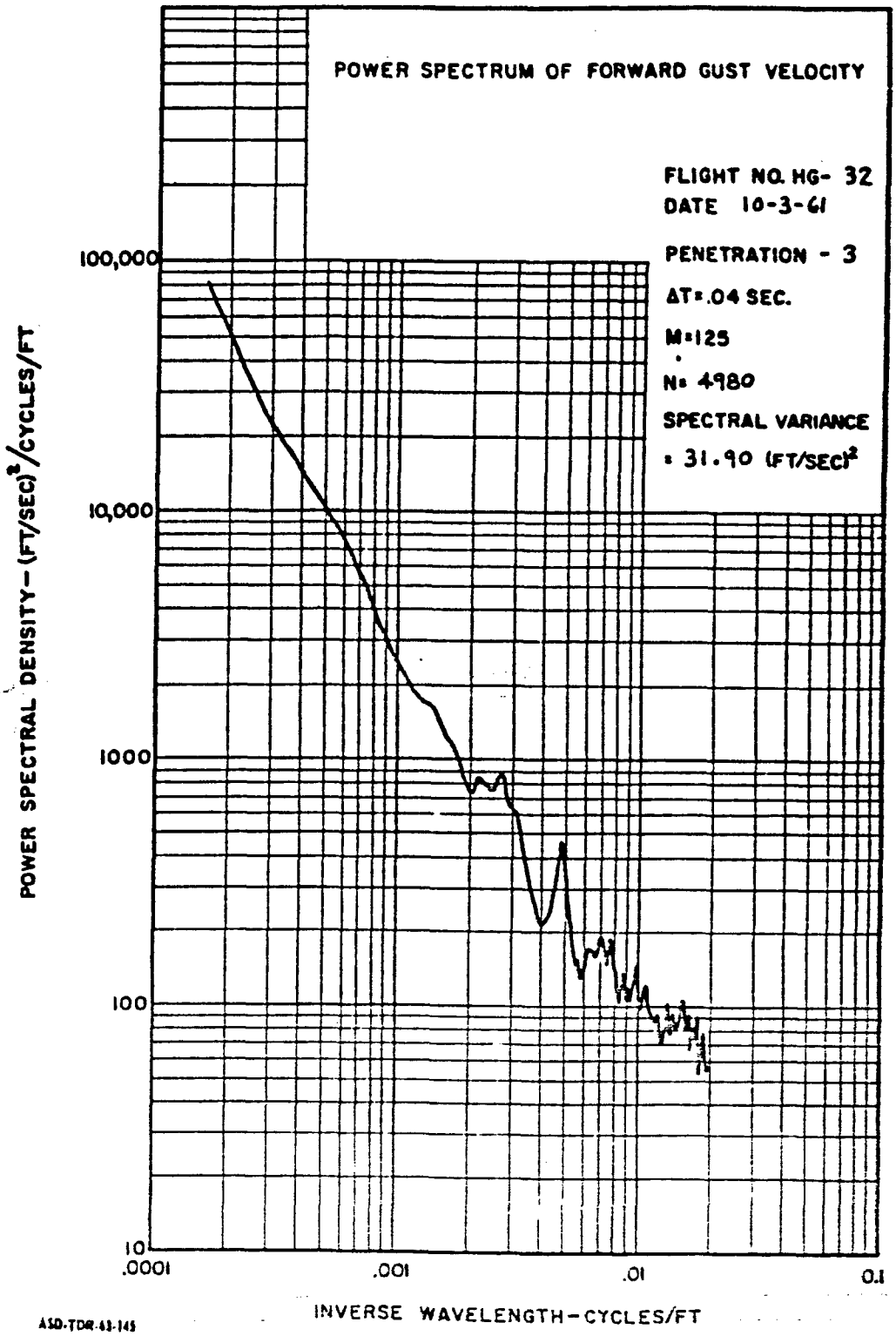

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N=5230
SPECTRAL VARIANCE
=39.32 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

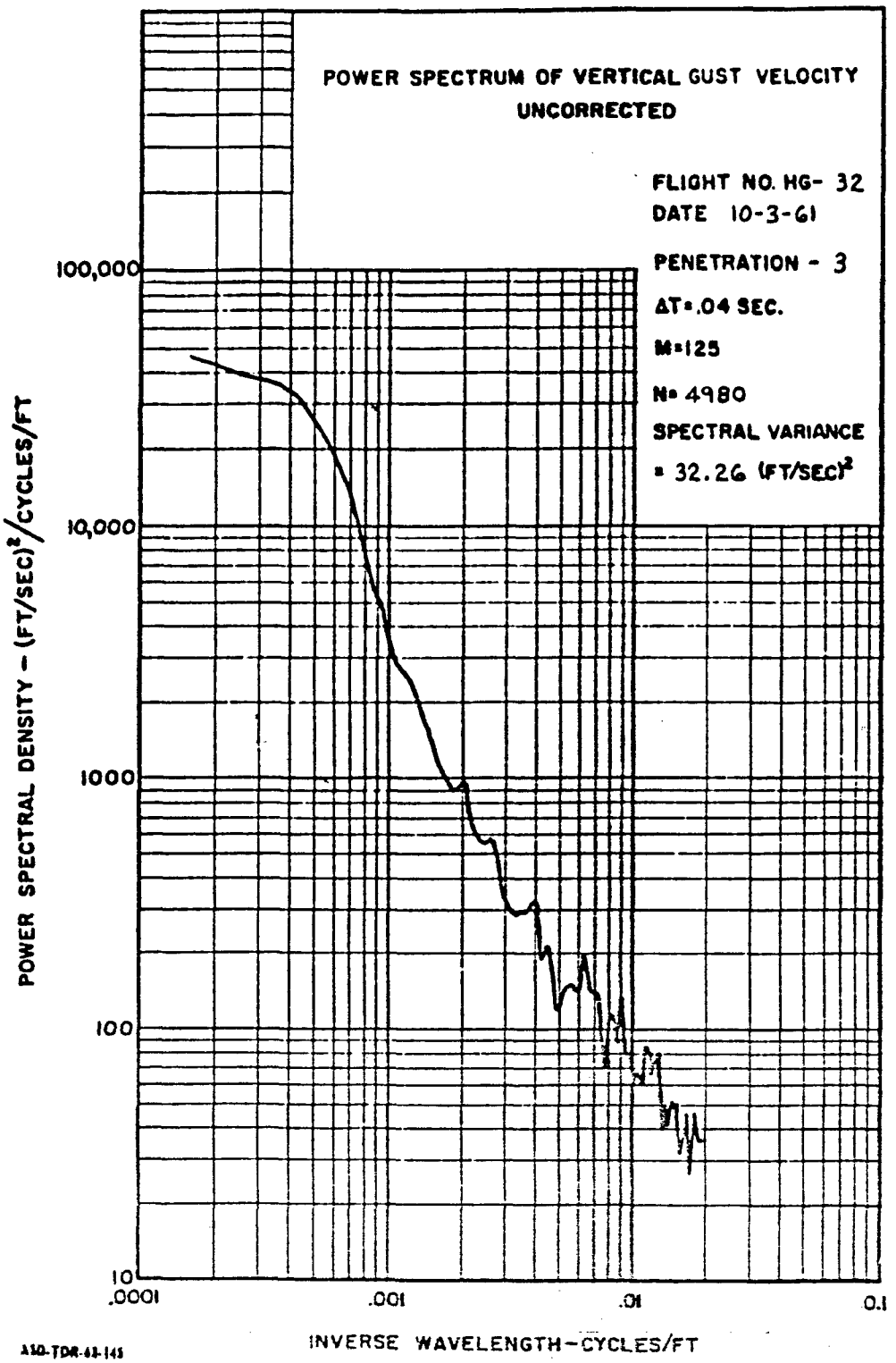

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 2
ΔT = .04 SEC.
M = 125
N = 5230
SPECTRAL VARIANCE
= 24.22 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

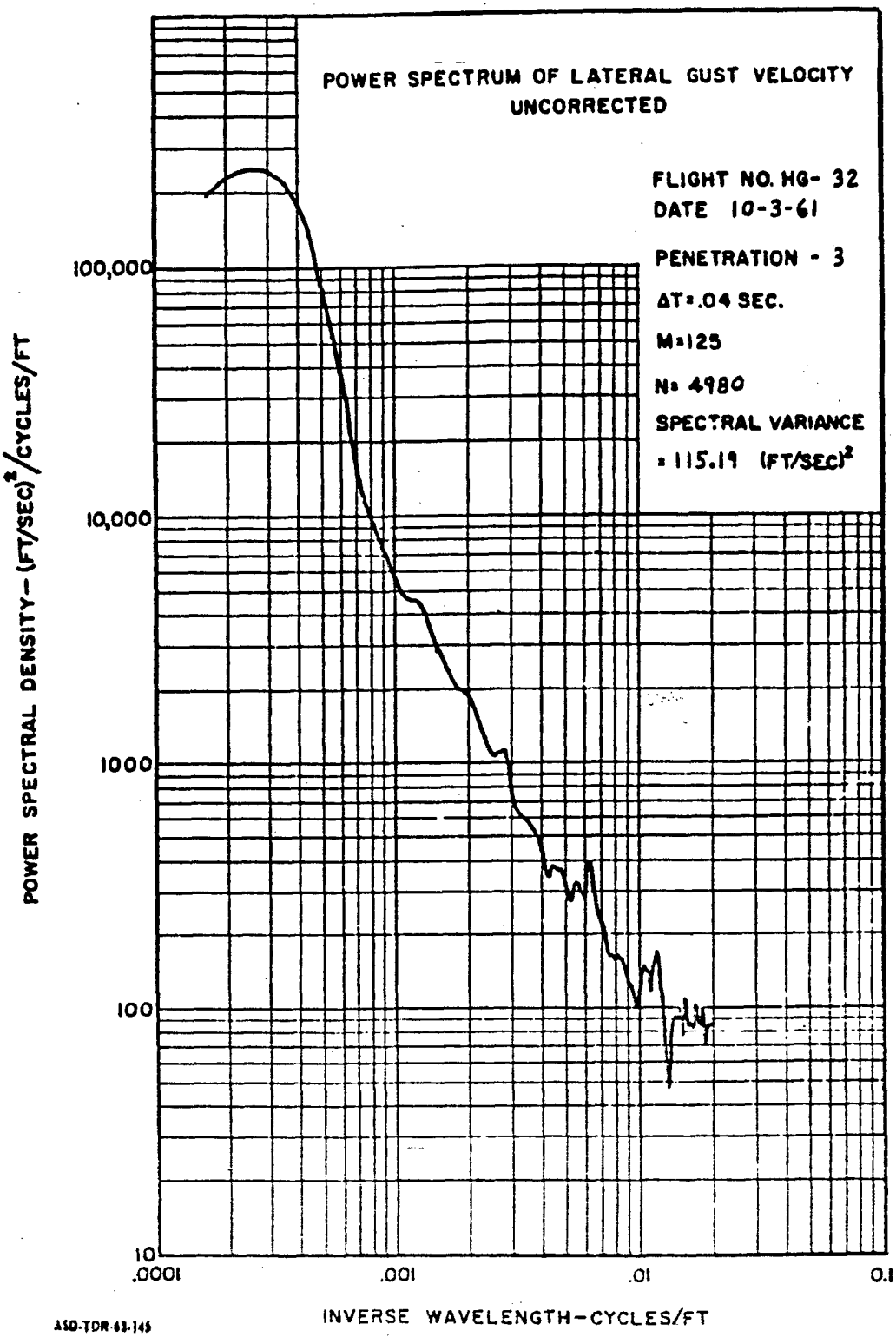

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 5230
SPECTRAL VARIANCE
= 98.15 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

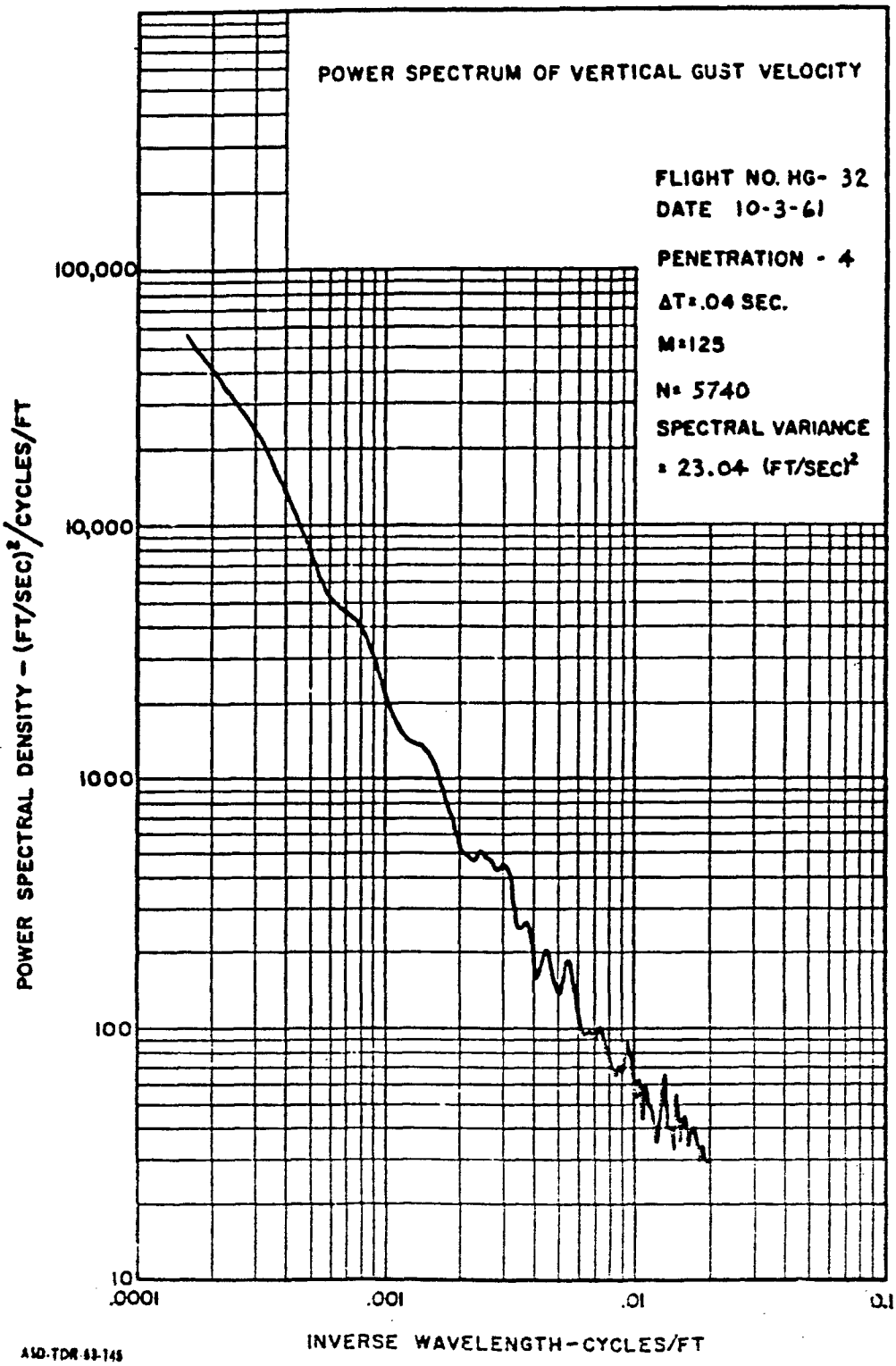

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N=4980
SPECTRAL VARIANCE
= 27.01 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

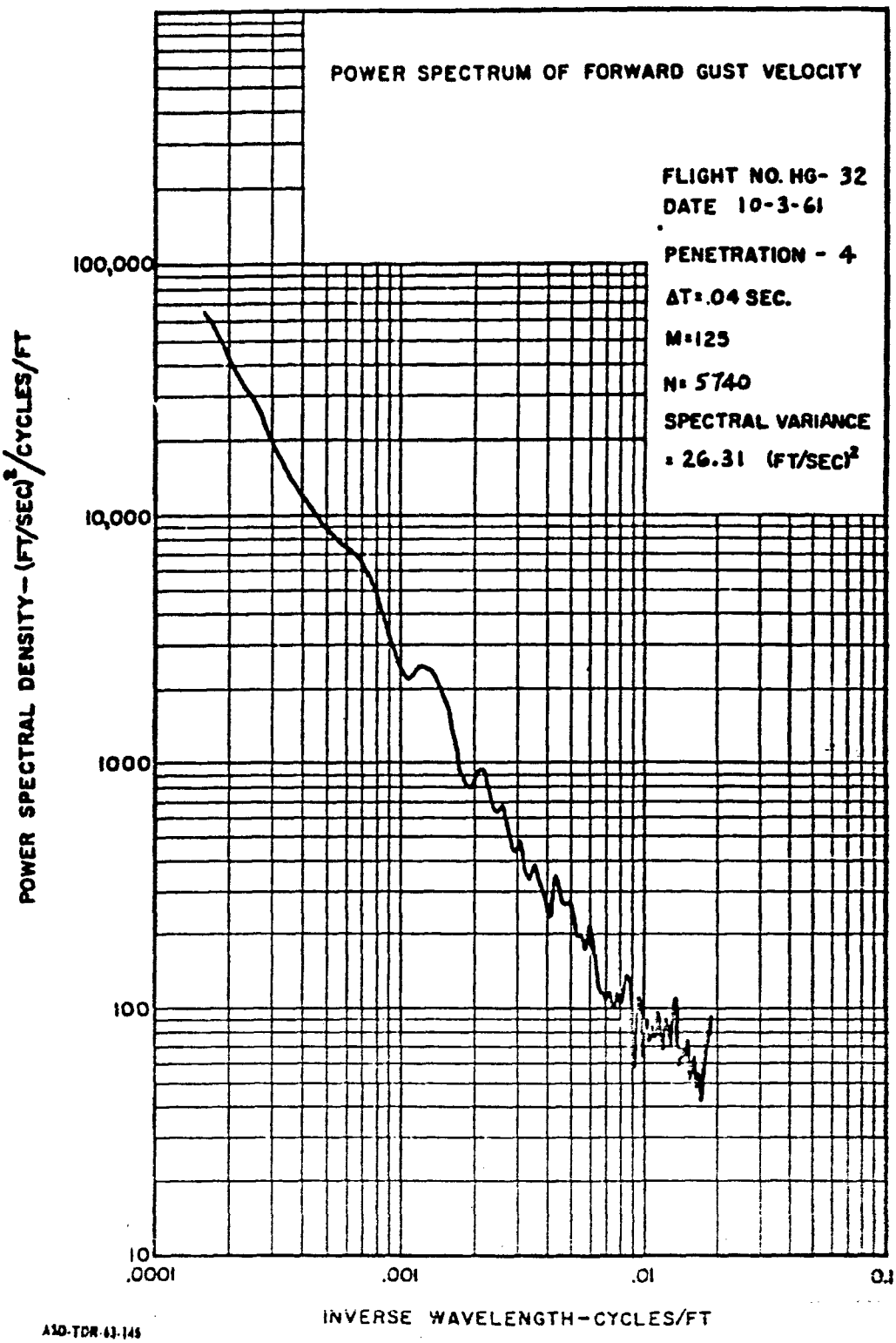

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 4980
SPECTRAL VARIANCE
= 35.43 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

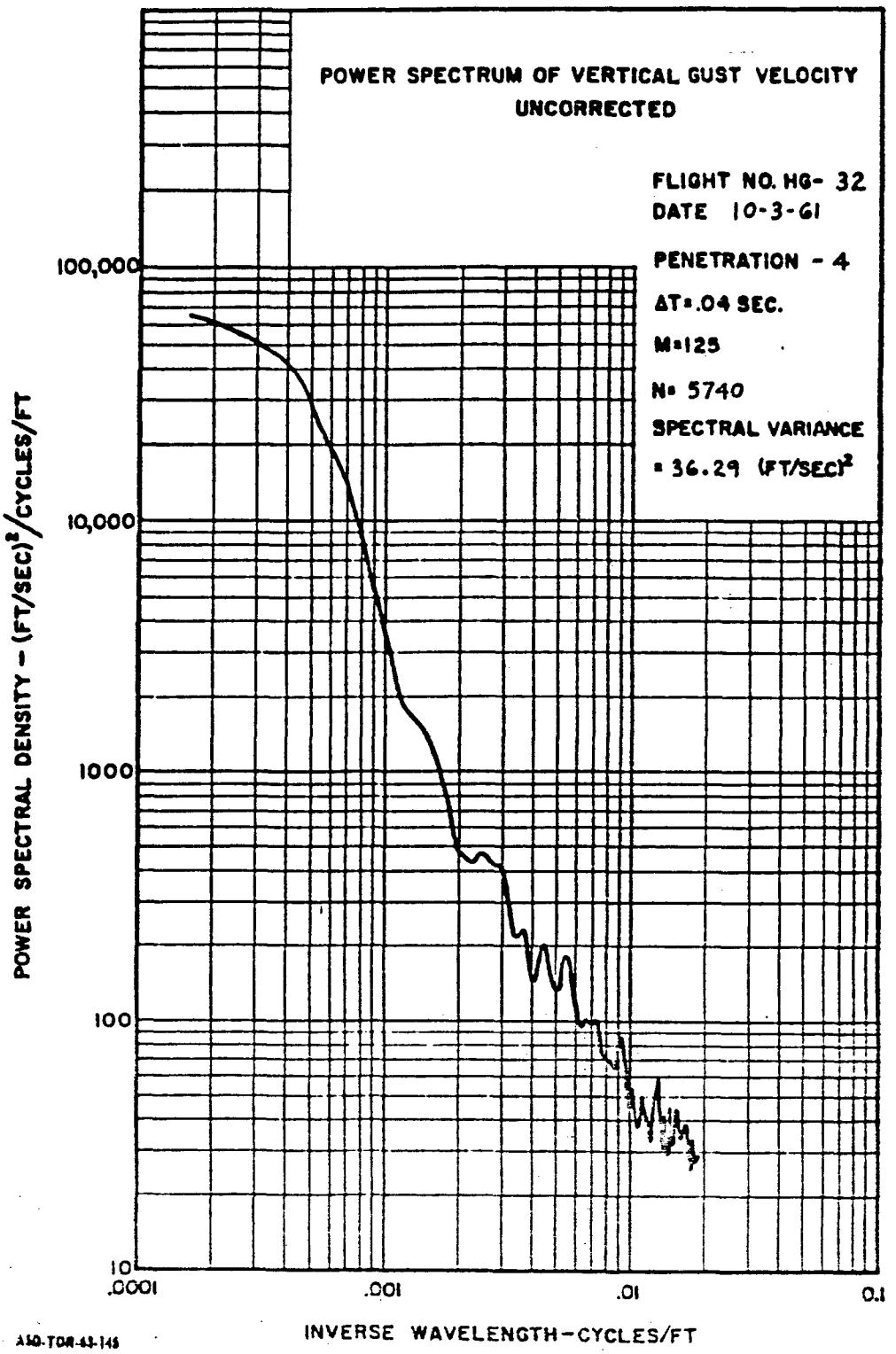

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 4980
SPECTRAL VARIANCE
= 31.90 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

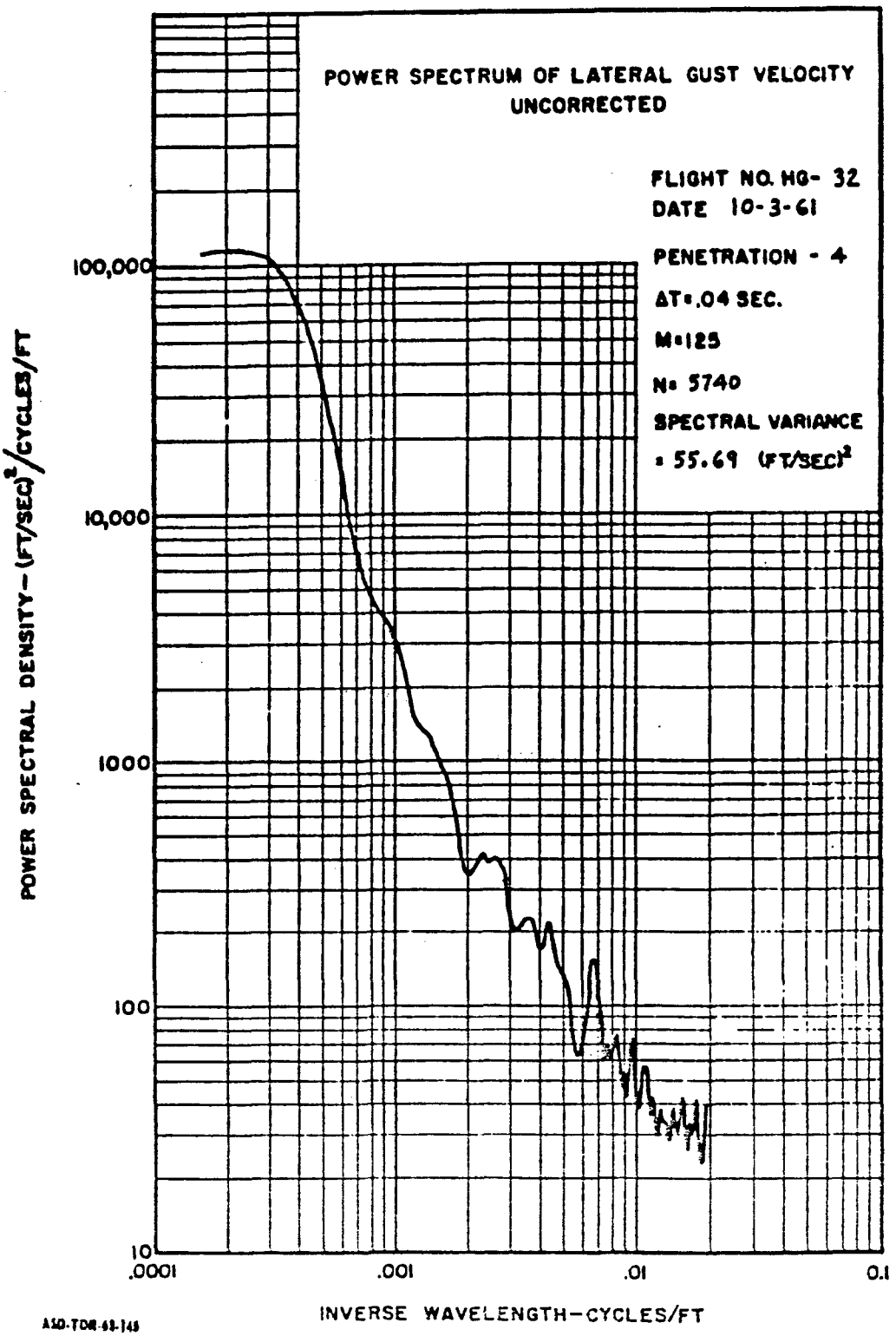

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 4980
SPECTRAL VARIANCE
= 32.26 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

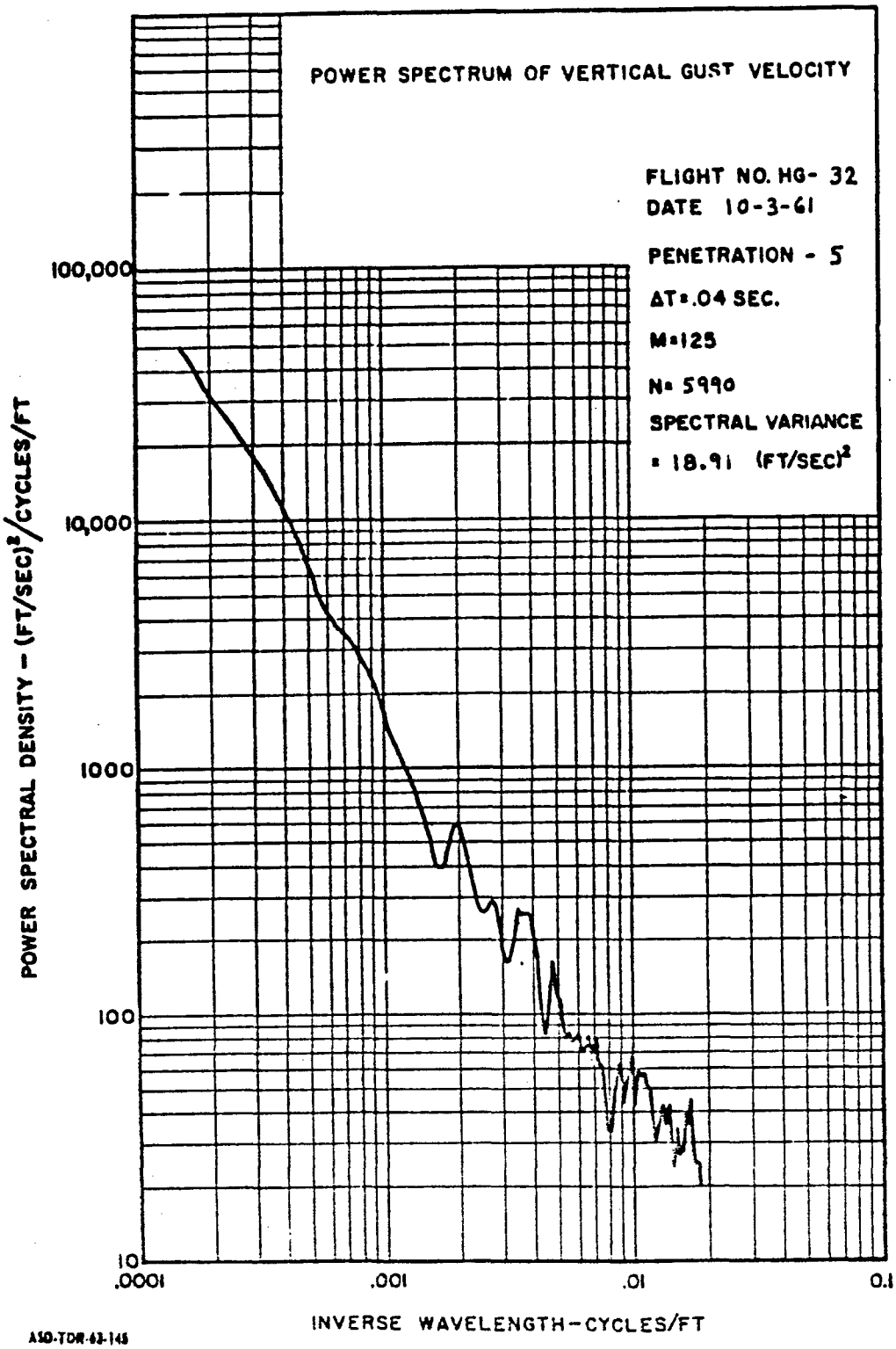

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 4980
SPECTRAL VARIANCE
= 115.19 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

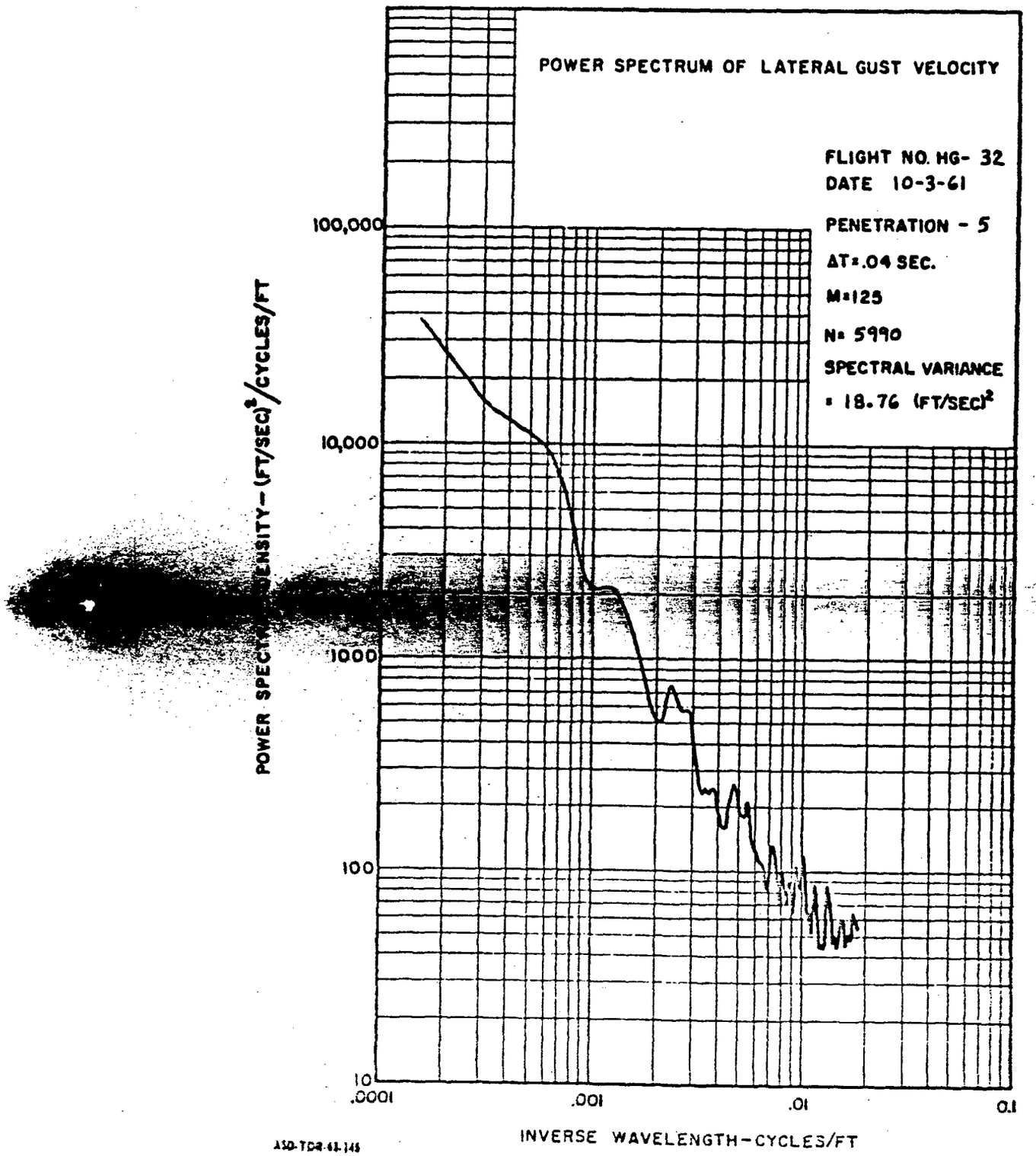

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 5740
SPECTRAL VARIANCE
= 23.04 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

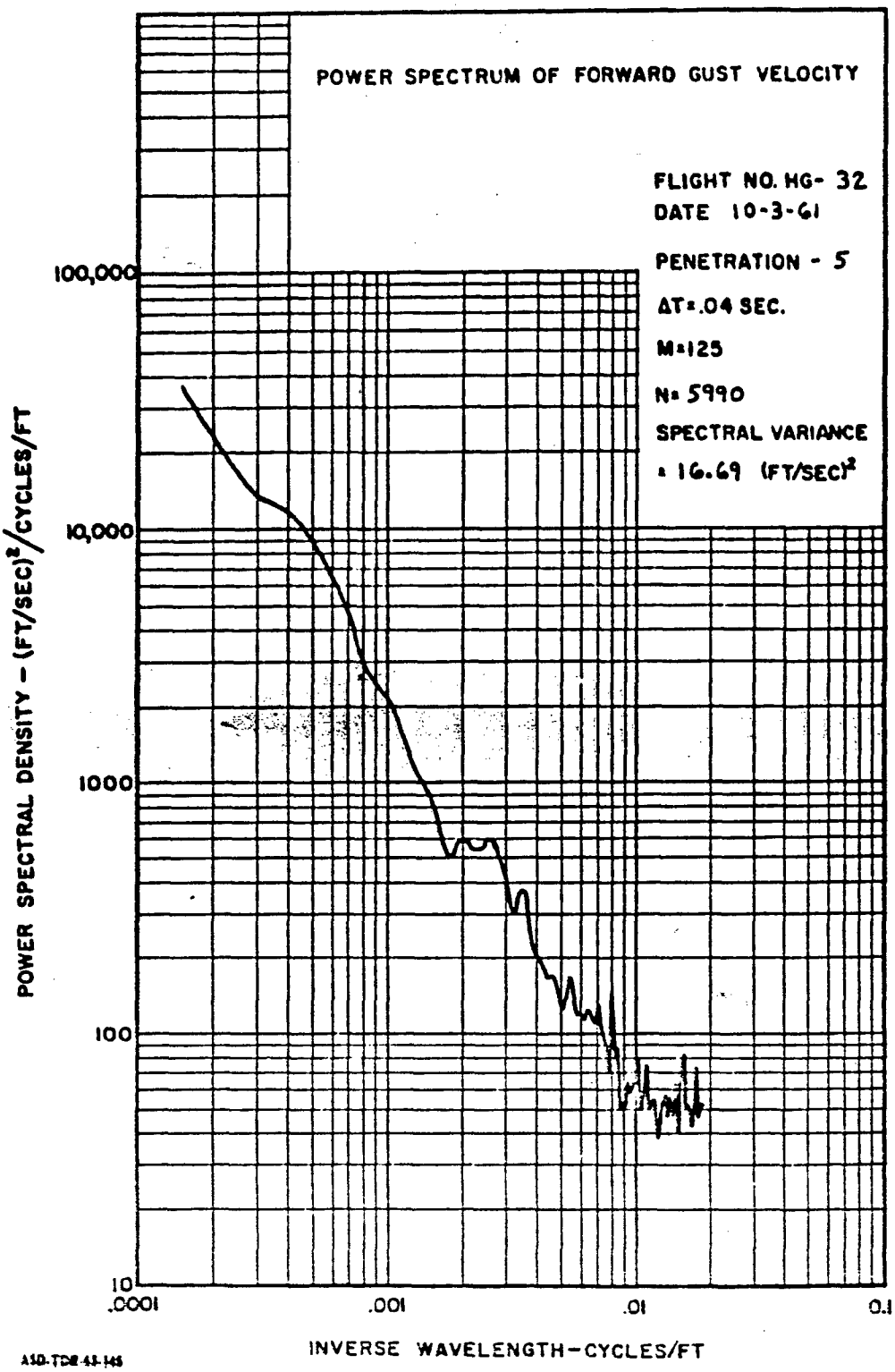

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 5740
SPECTRAL VARIANCE
= 26.31 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

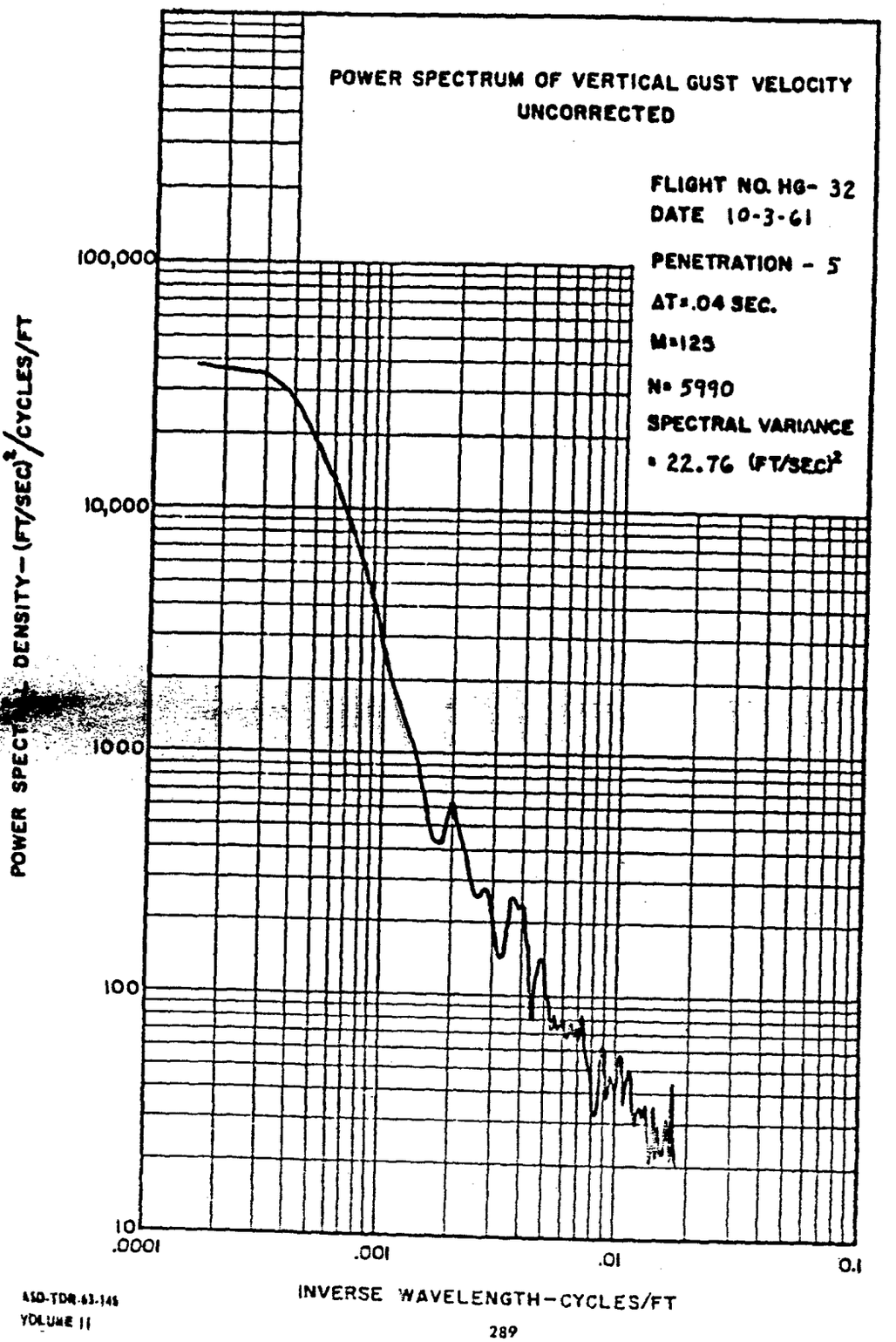

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 5740
SPECTRAL VARIANCE
= 36.29 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

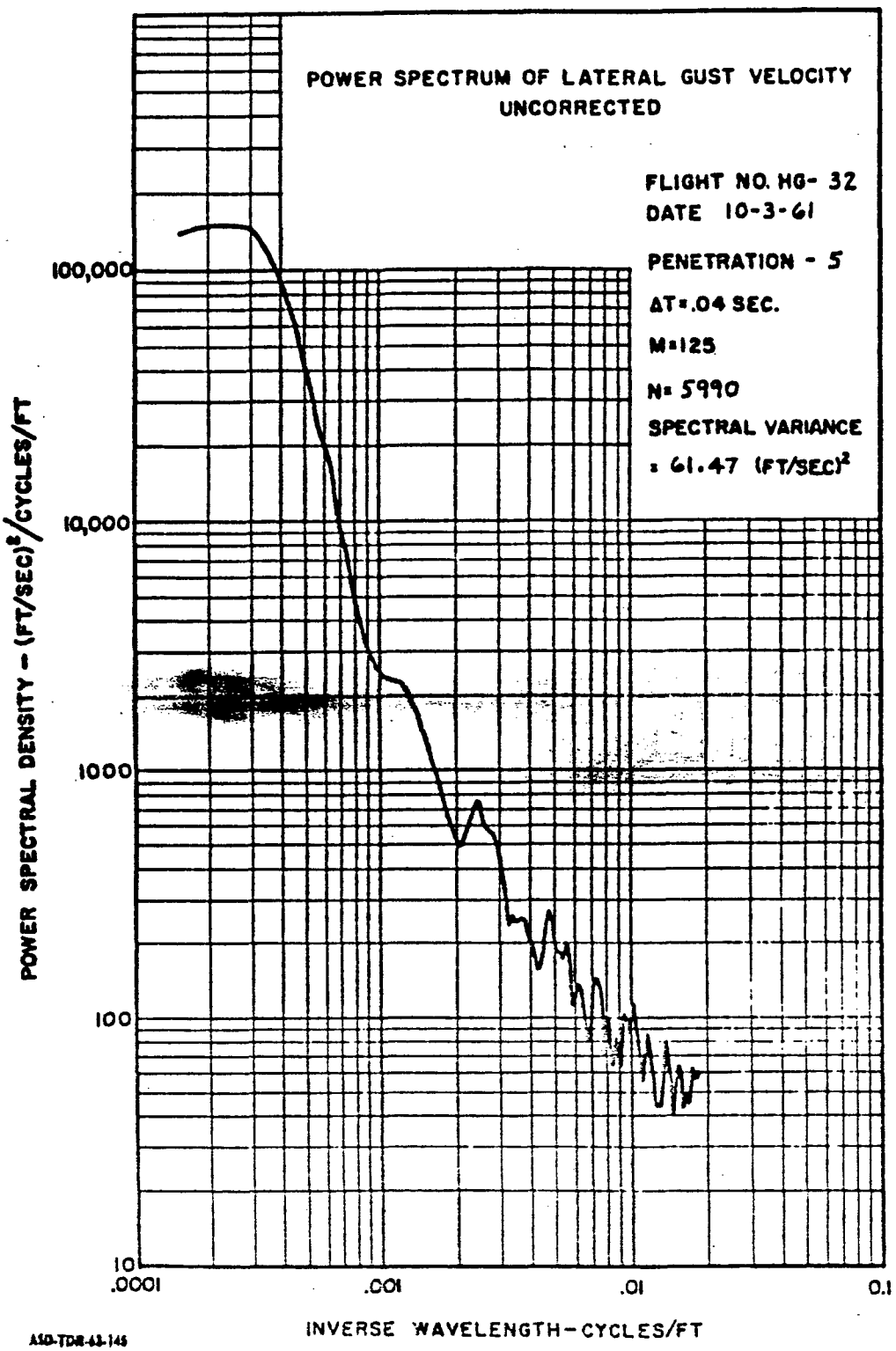

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 5740
SPECTRAL VARIANCE
= 55.69 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

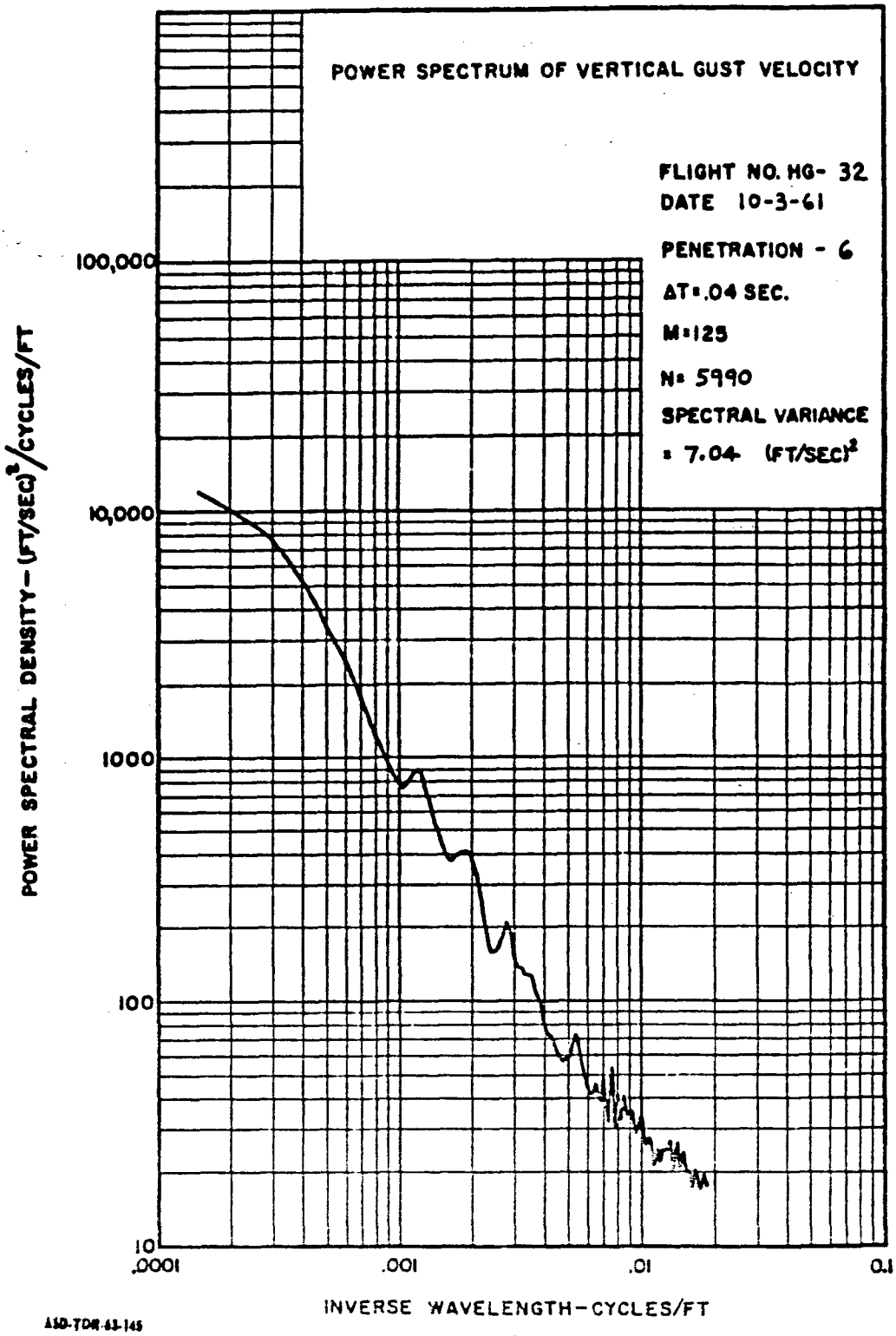

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 18.91 (FT/SEC)²
100,000
10,000
1000
100
10
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

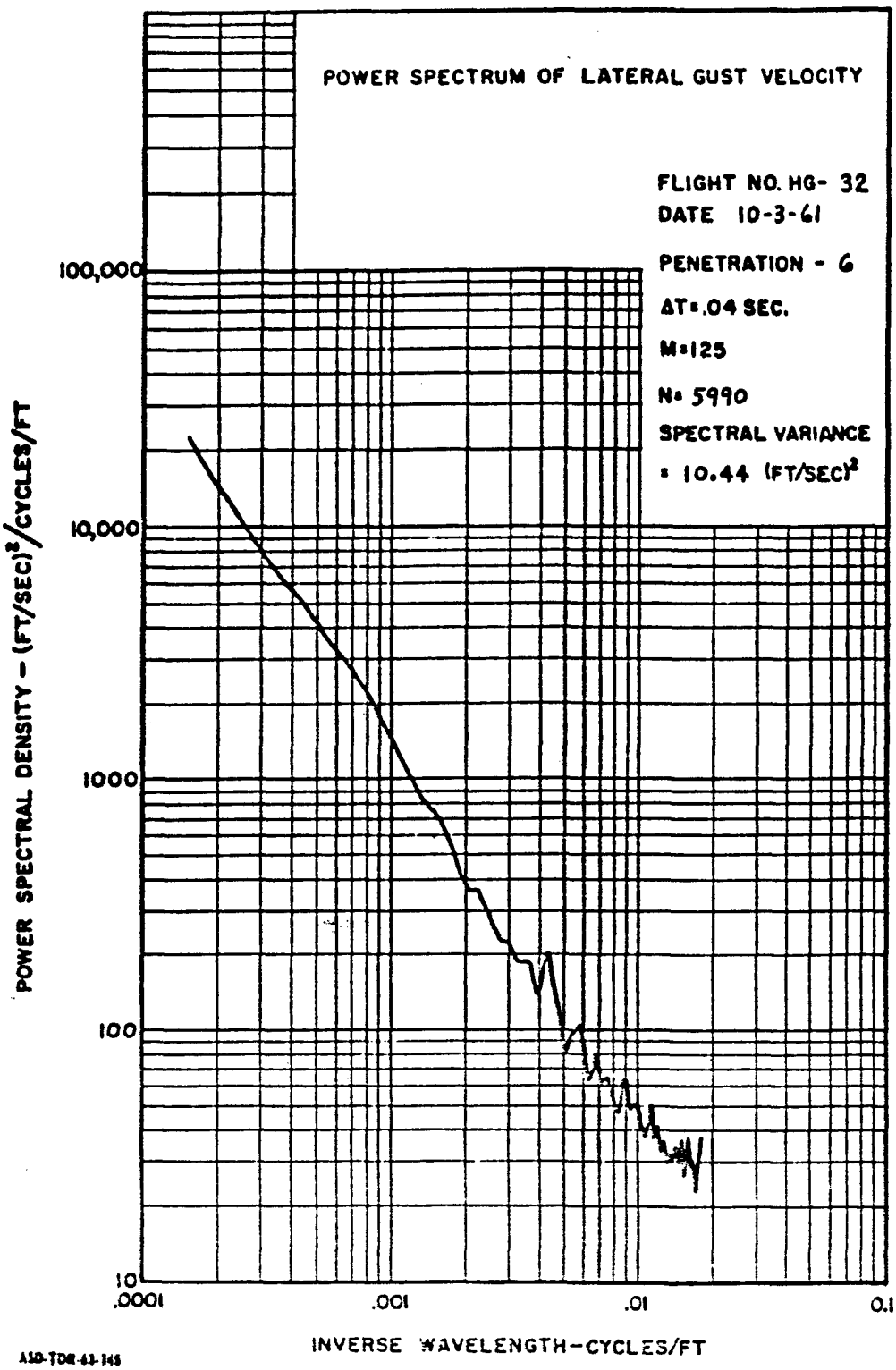

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 18.76 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

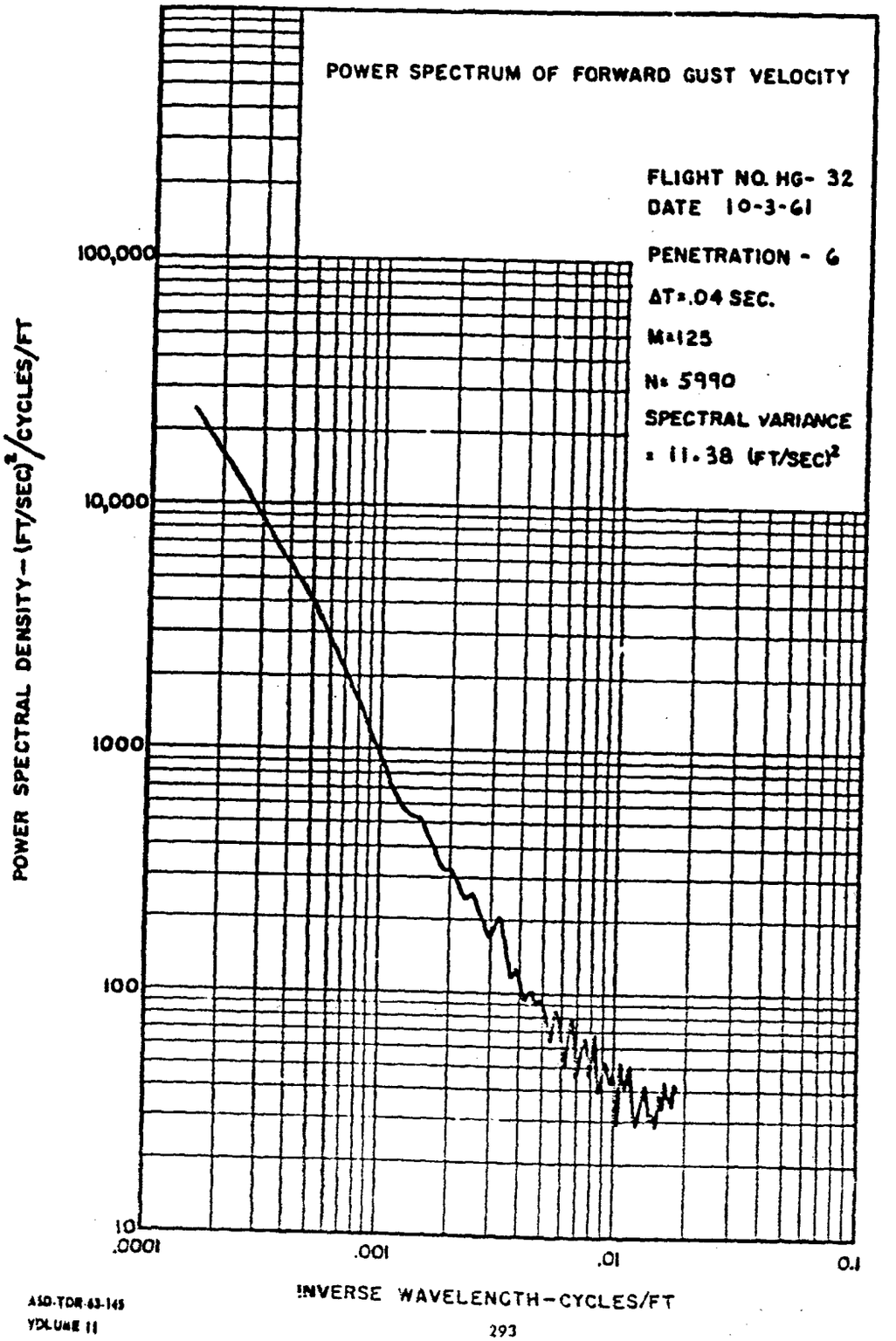

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 16.69 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

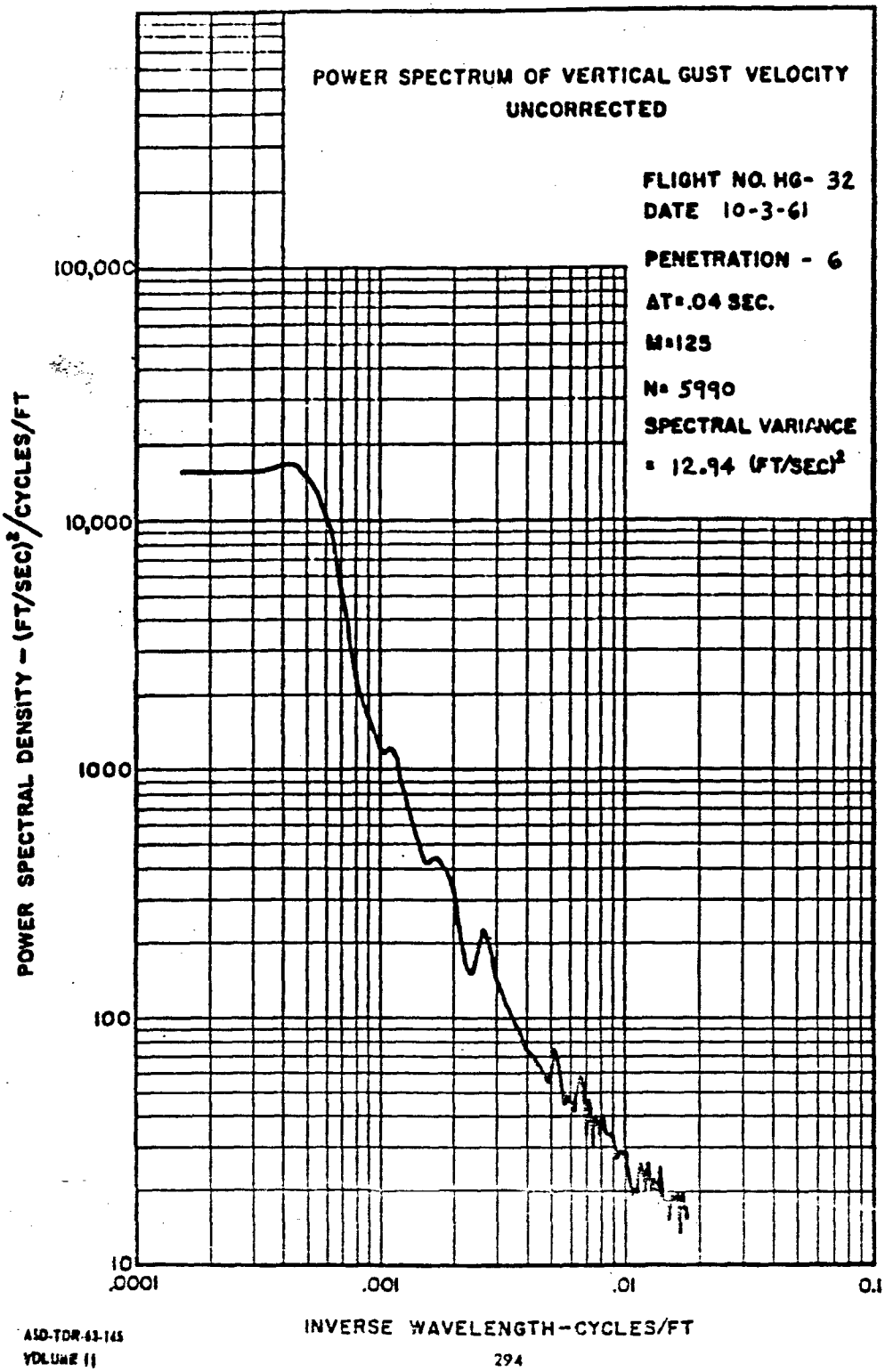

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 22.76 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY—(FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH—CYCLES/FT

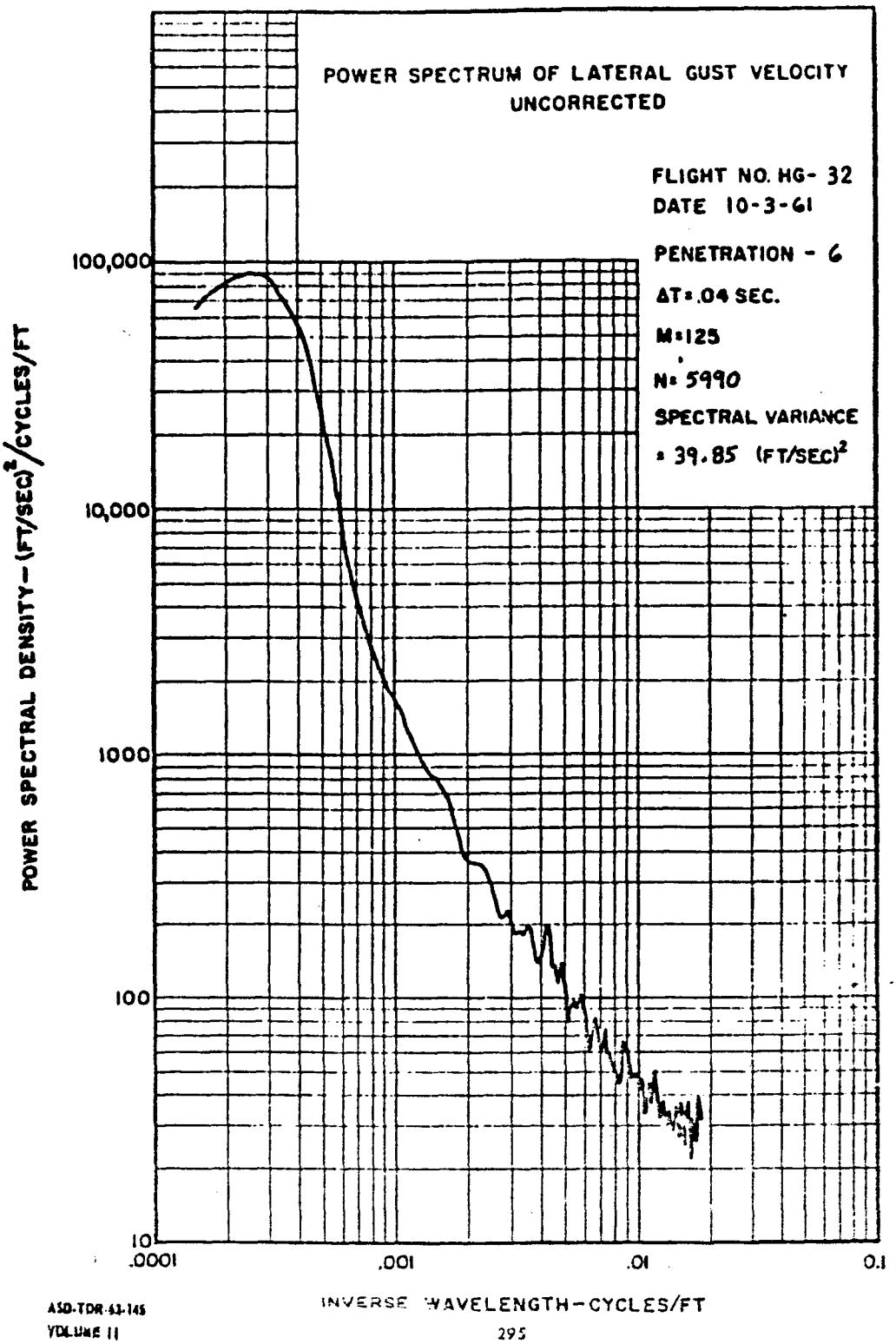

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 61.47 (FT/SEC)²
100,000
10,000
1000
100
10
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

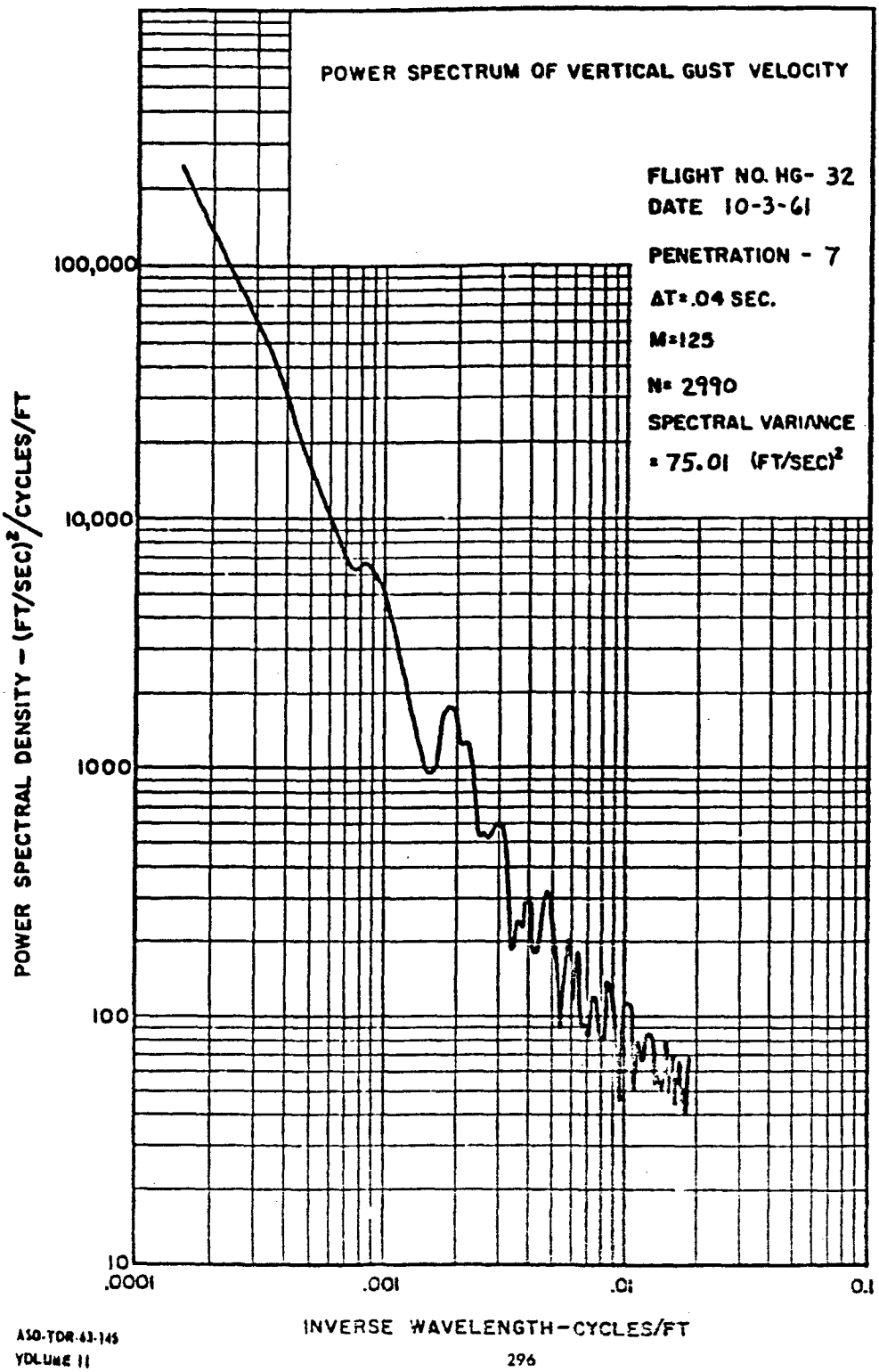

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 7.04 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

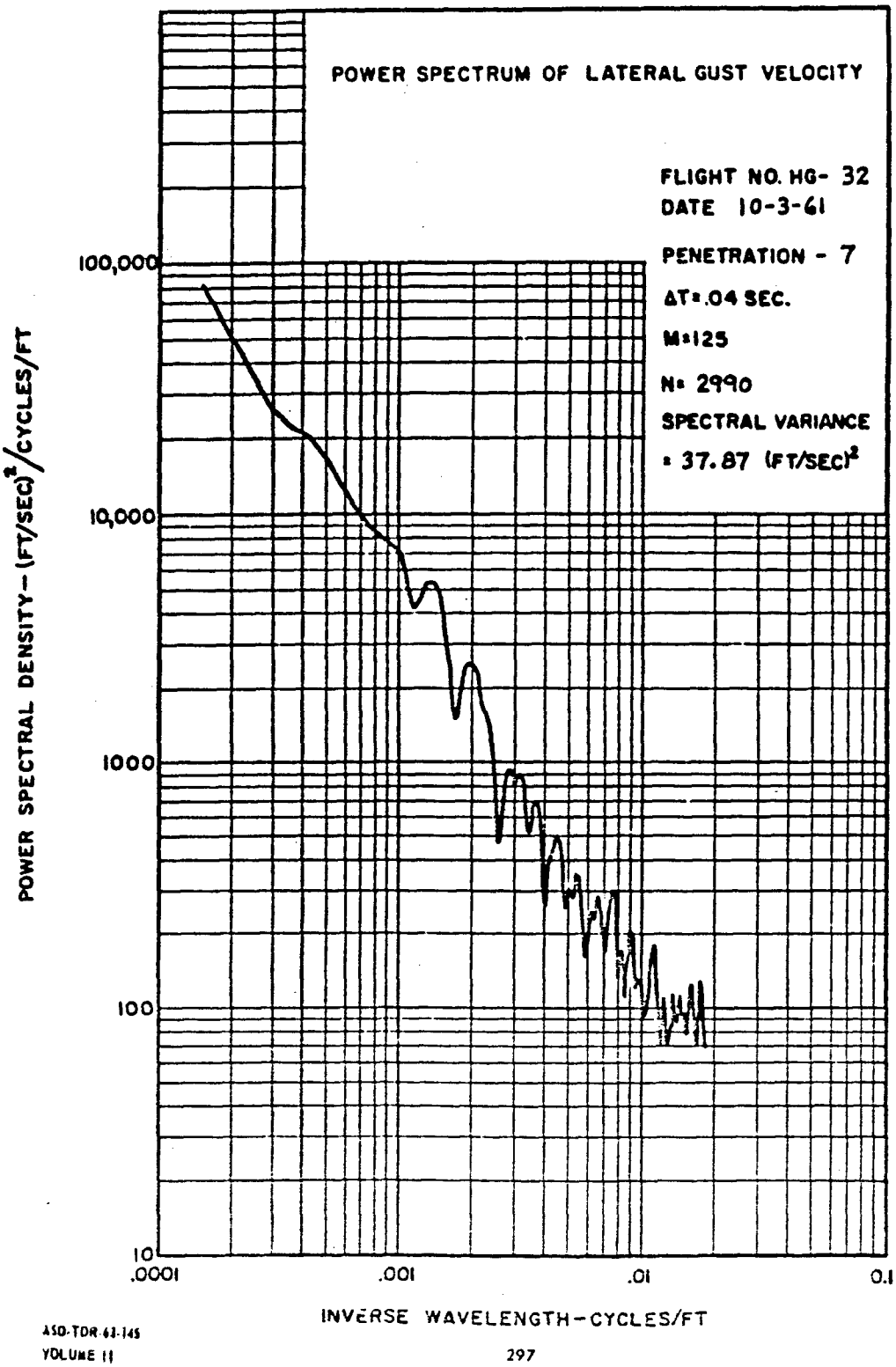

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 10.44 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

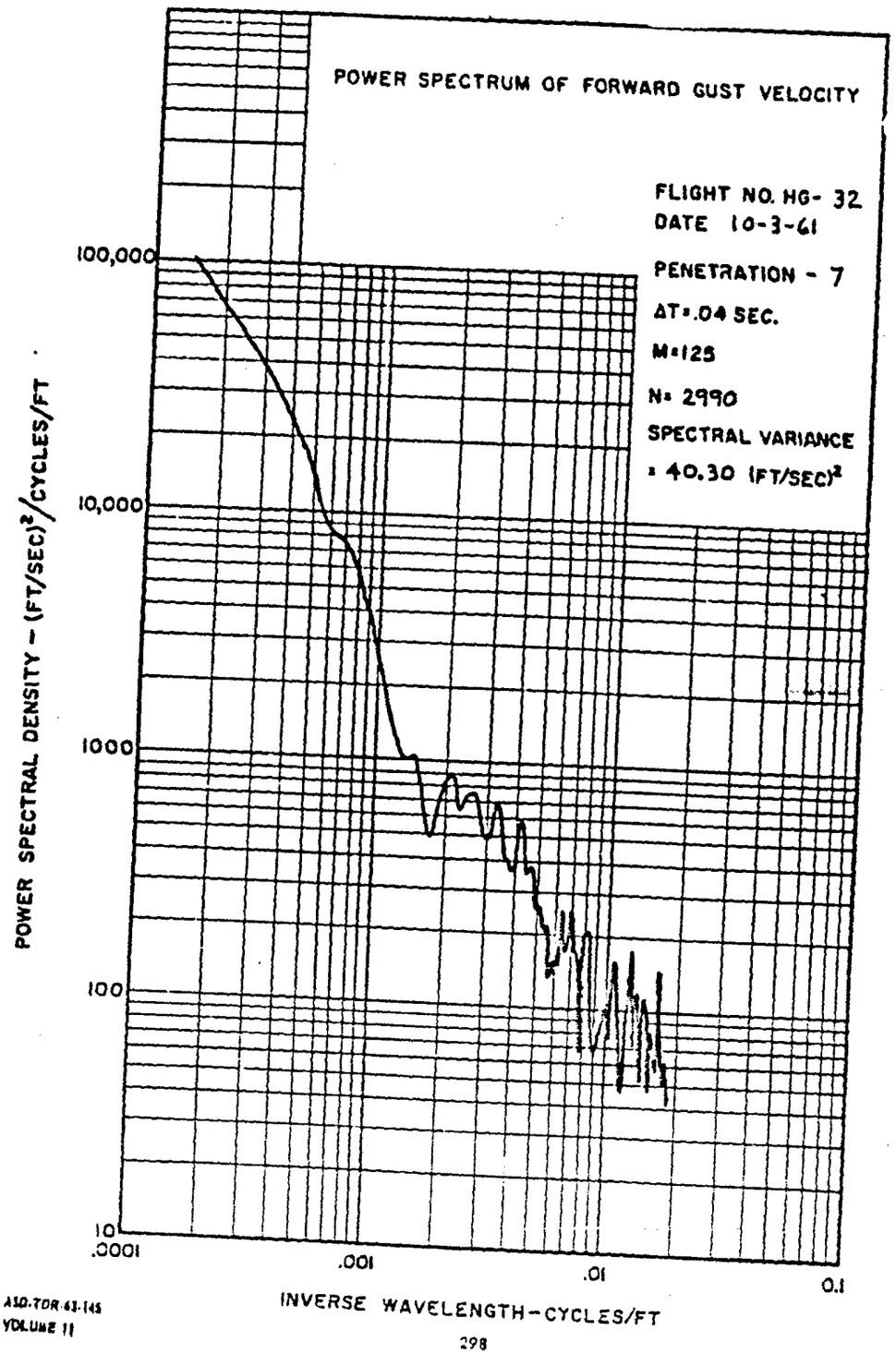

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 11.38 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

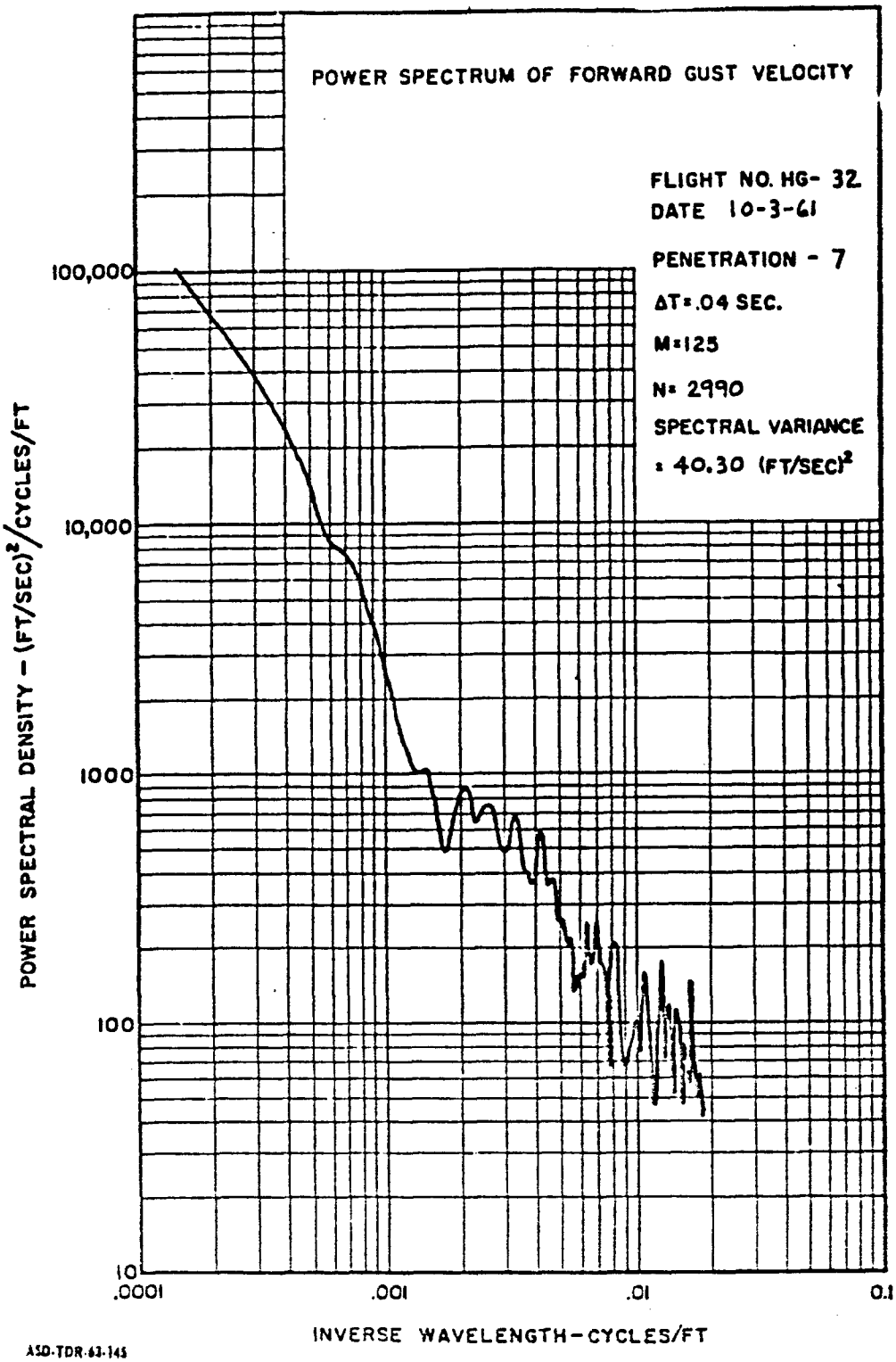

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 12.94 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

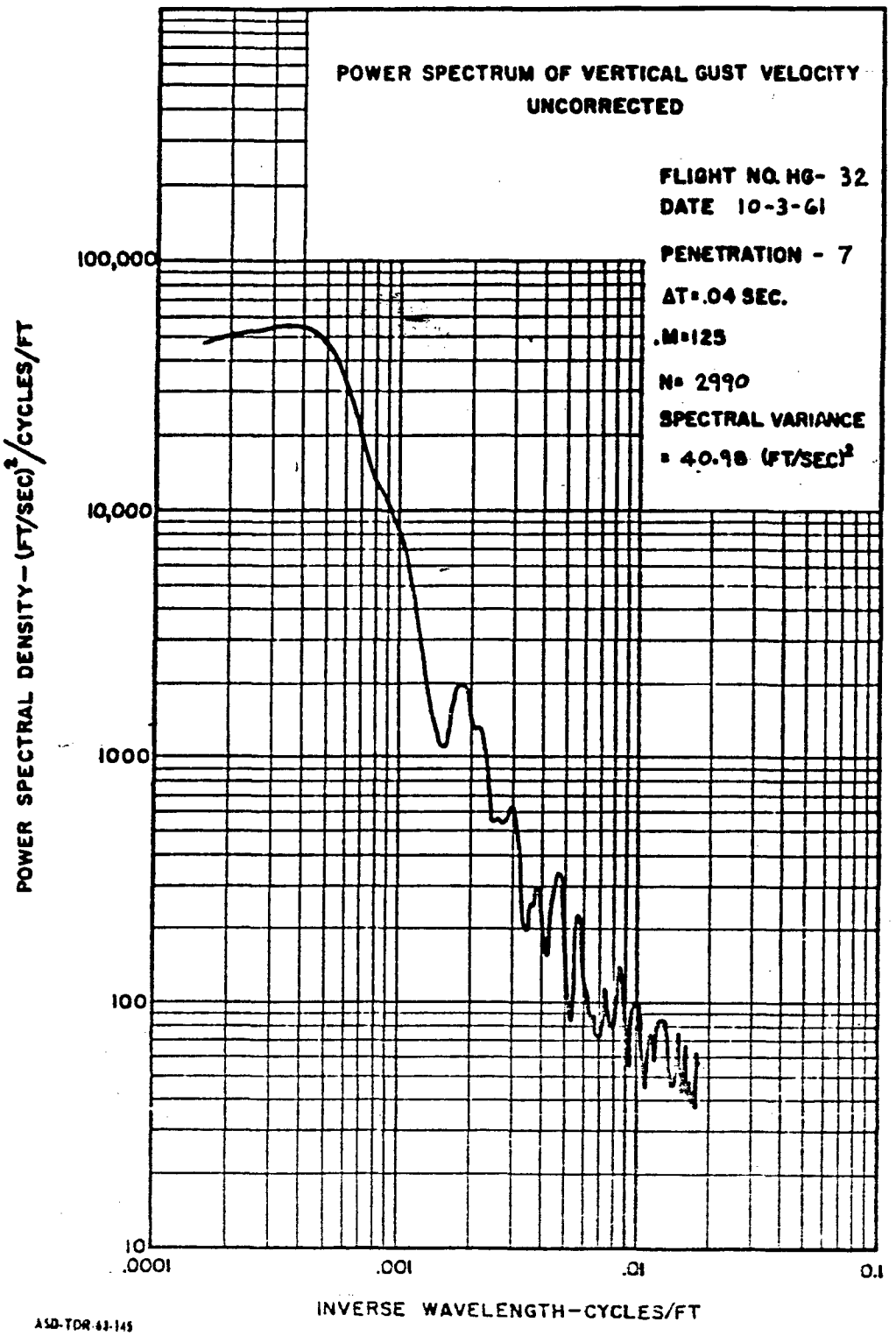

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 39.85 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

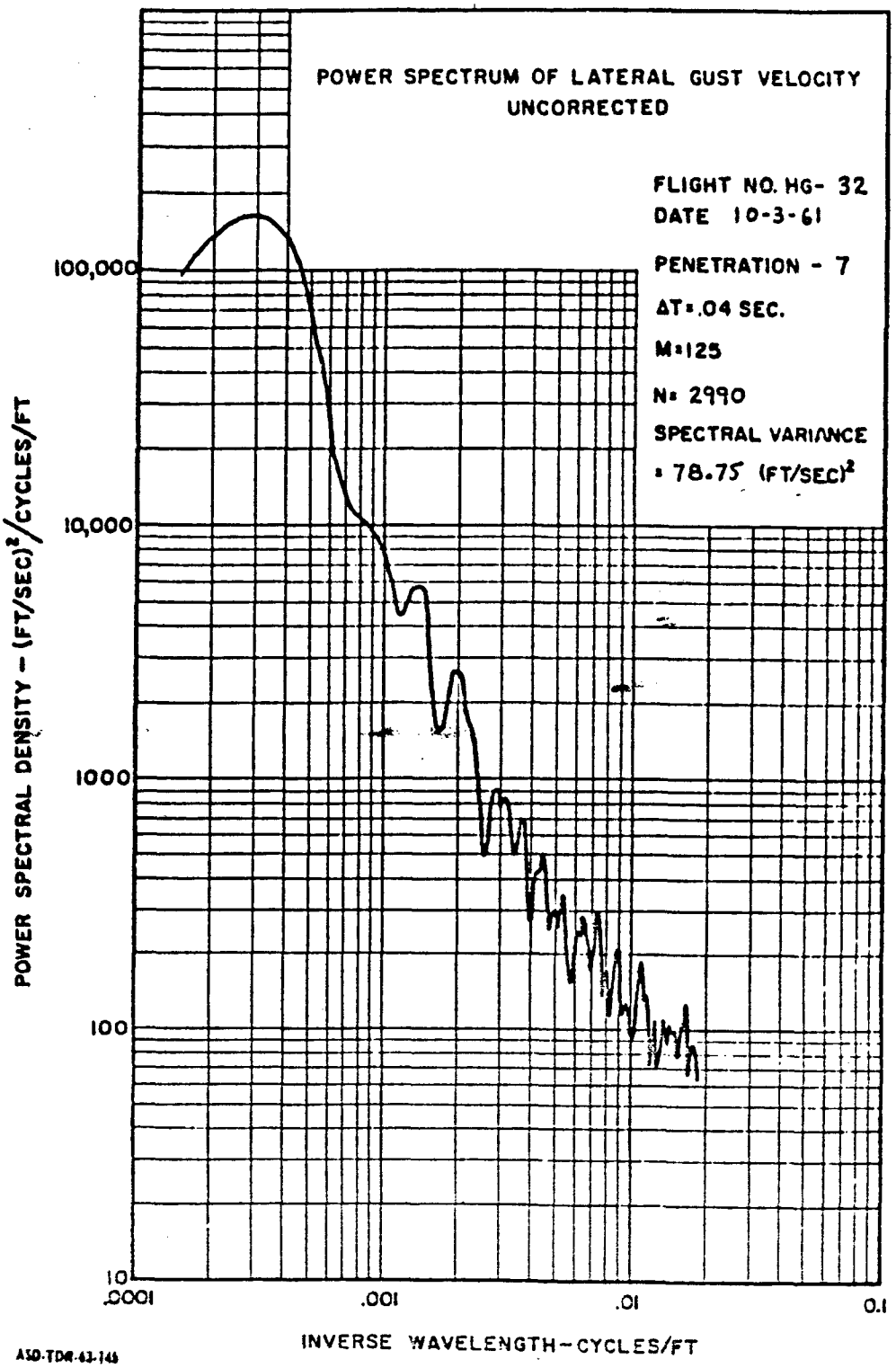

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 2990
SPECTRAL VARIANCE
= 75.01 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

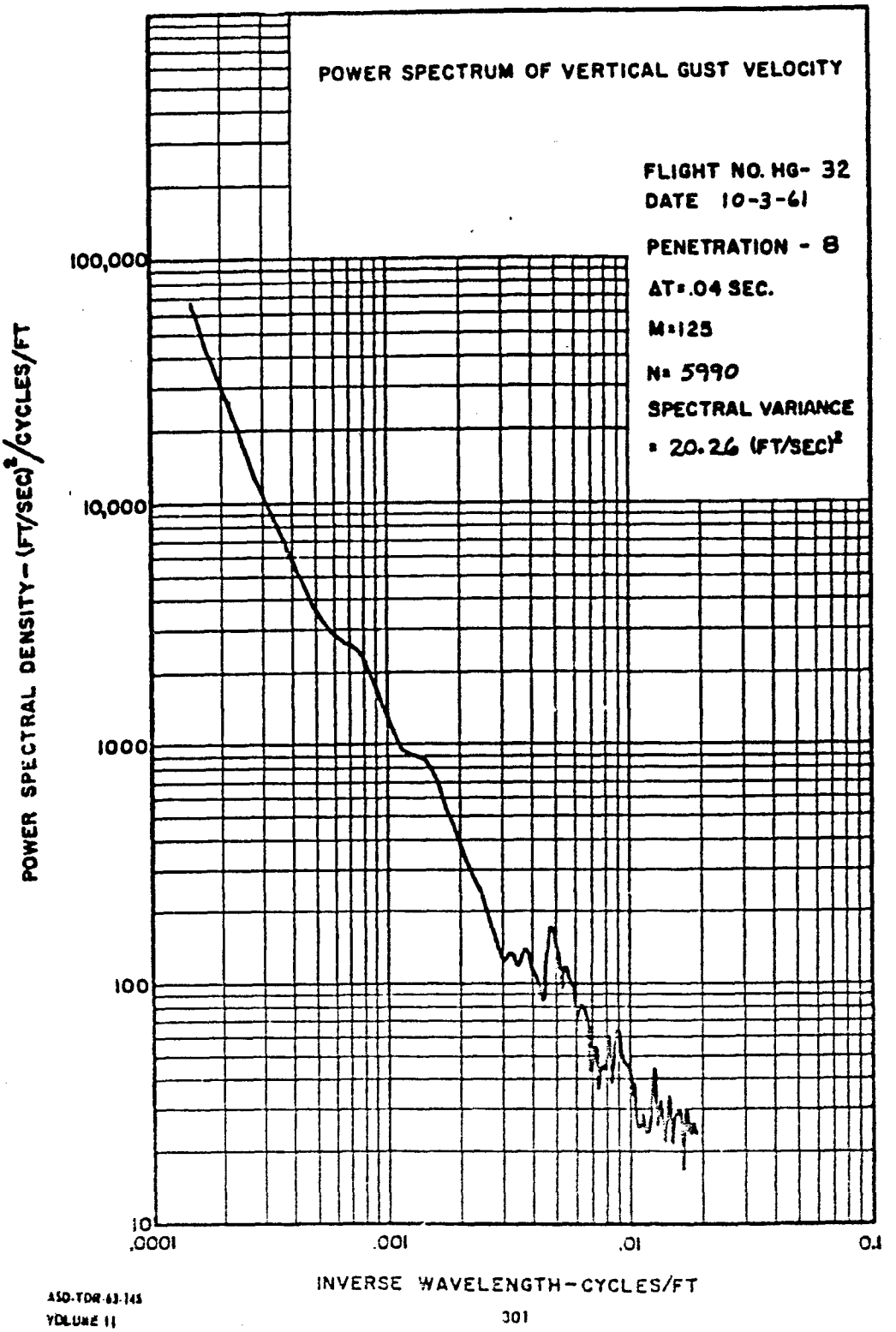

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 2990
SPECTRAL VARIANCE
= 37.87 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

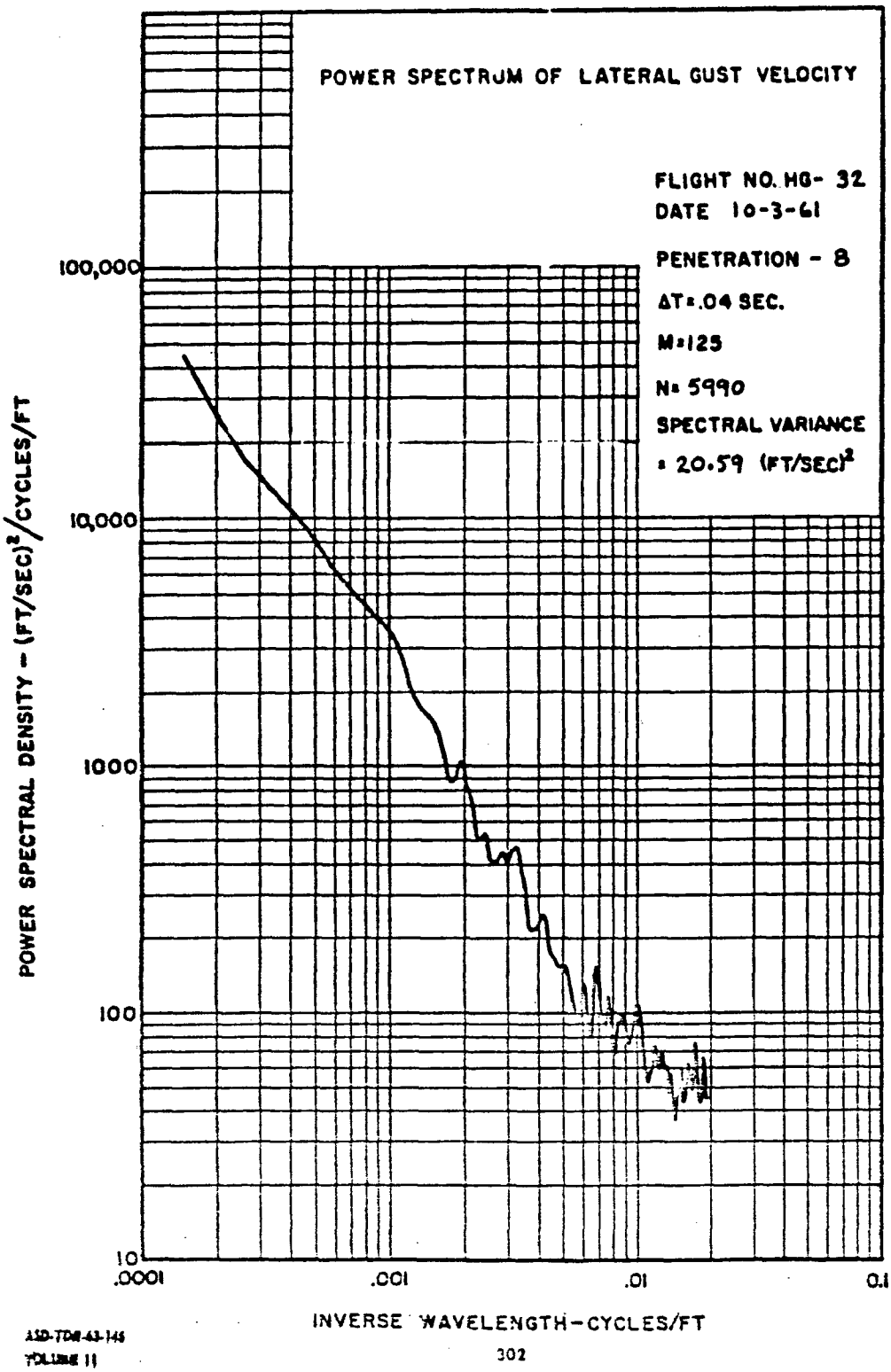

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 2990
SPECTRAL VARIANCE
= 40.30 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

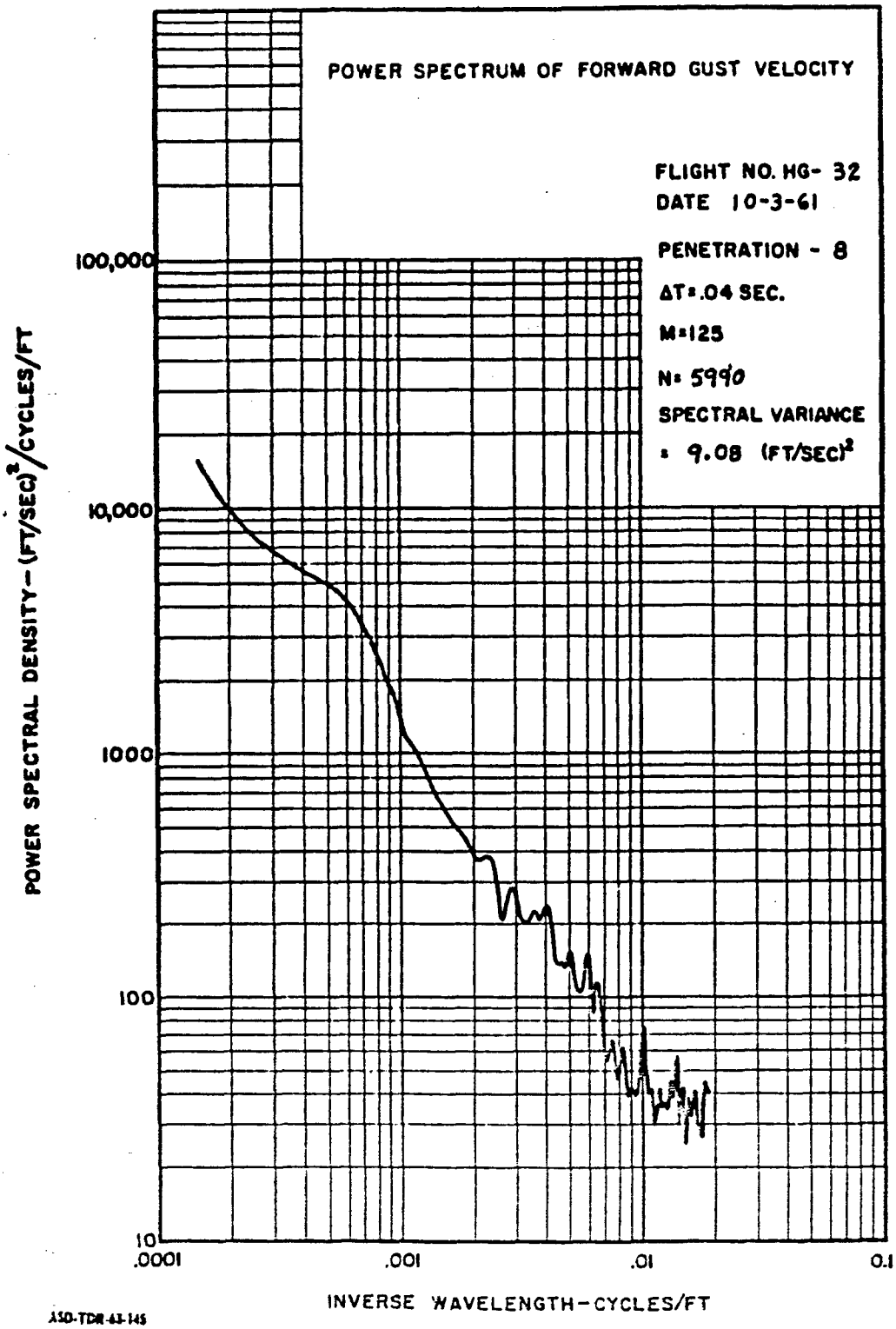

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 2990
SPECTRAL VARIANCE
= 40.30 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

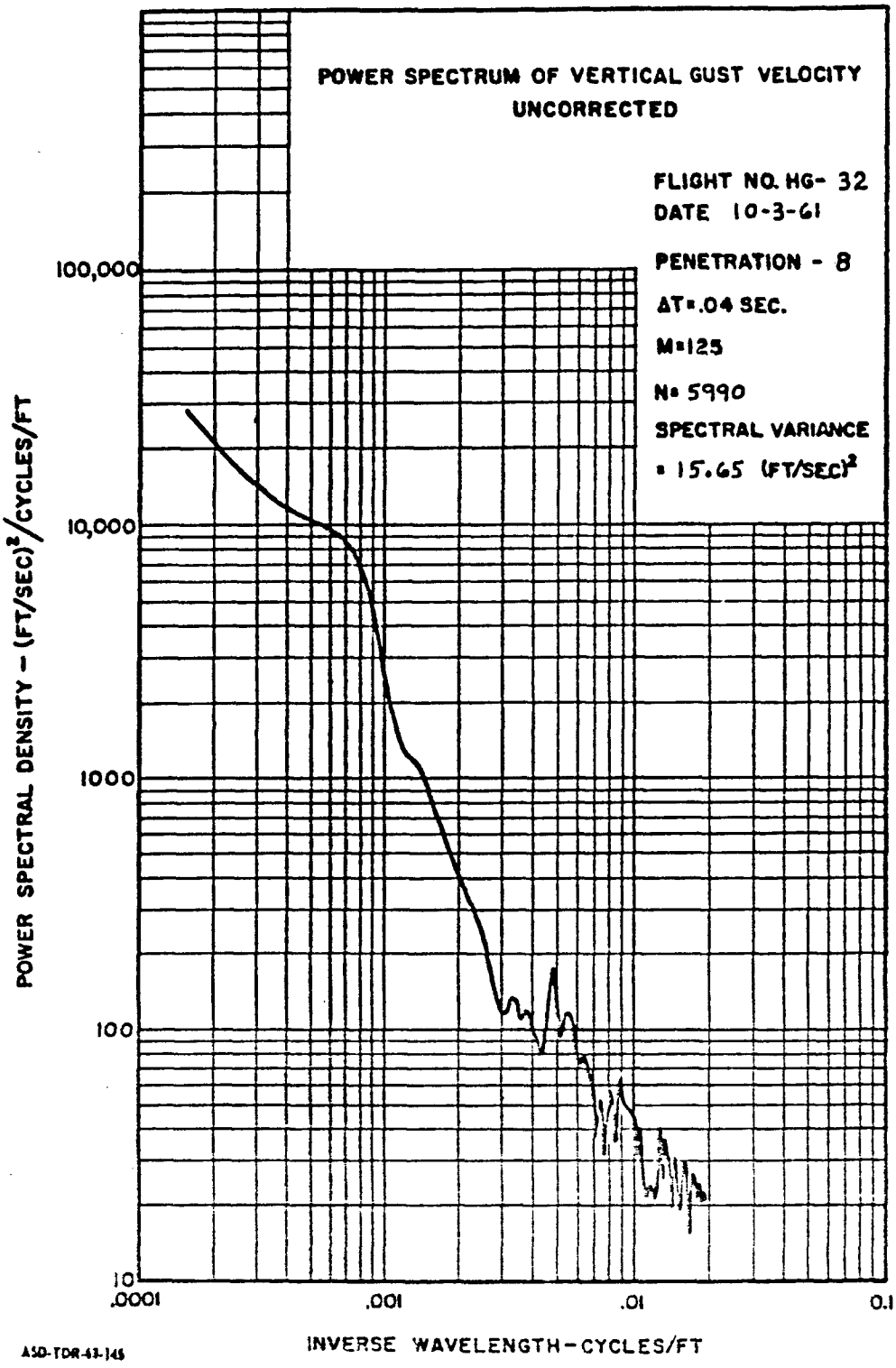

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 2990
SPECTRAL VARIANCE
= 40.98 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

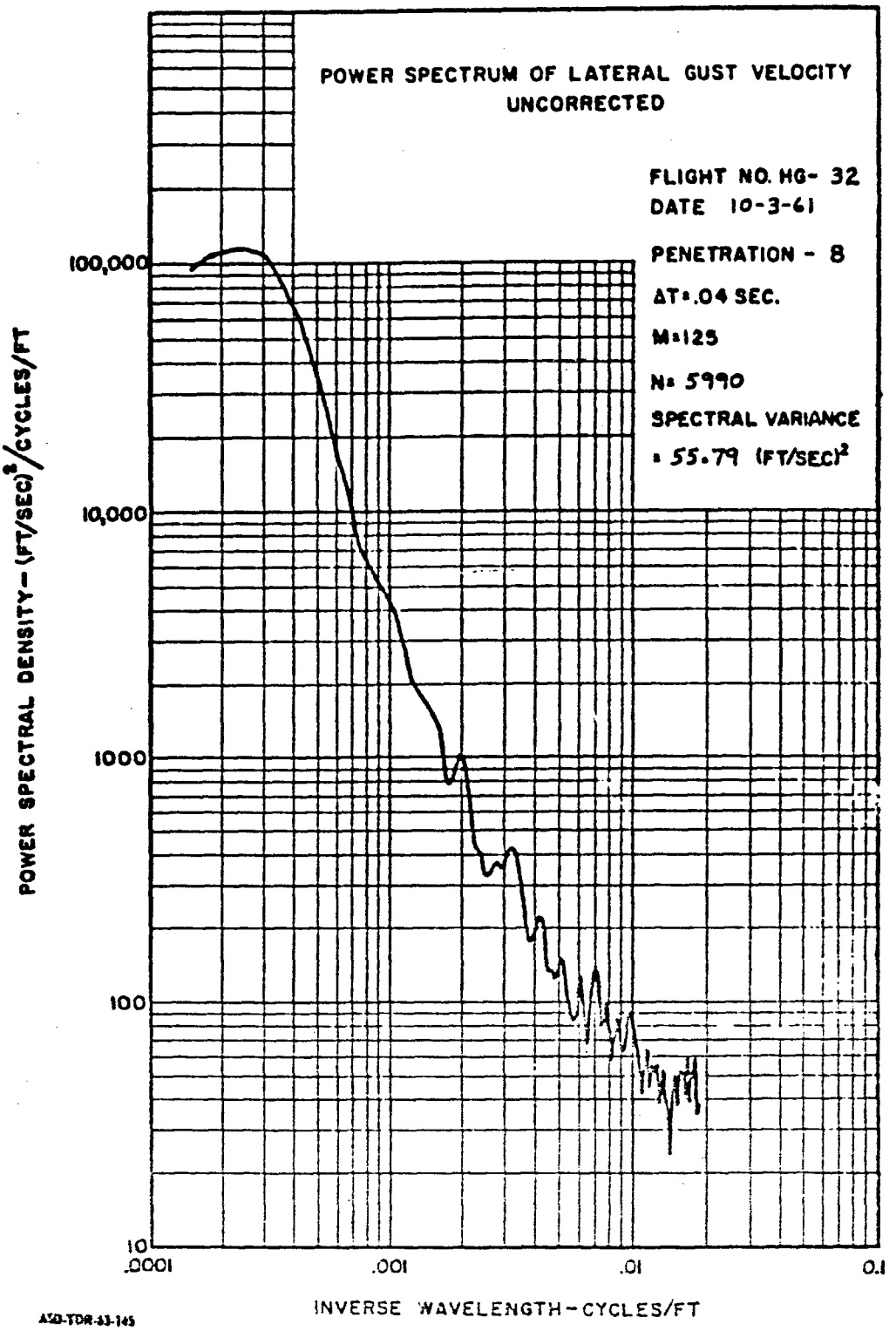

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 2990
SPECTRAL VARIANCE
= 78.75 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

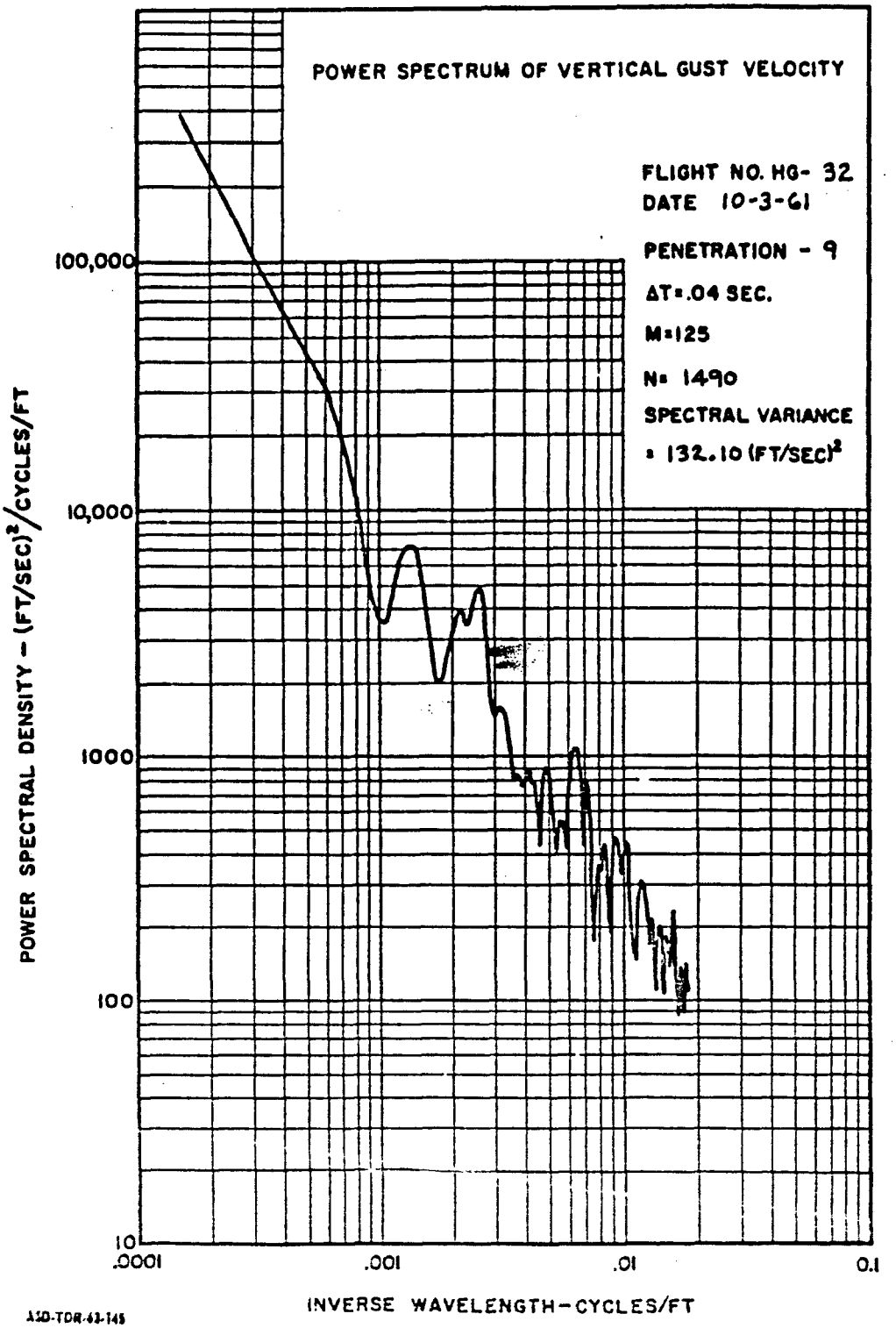

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 20.26 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

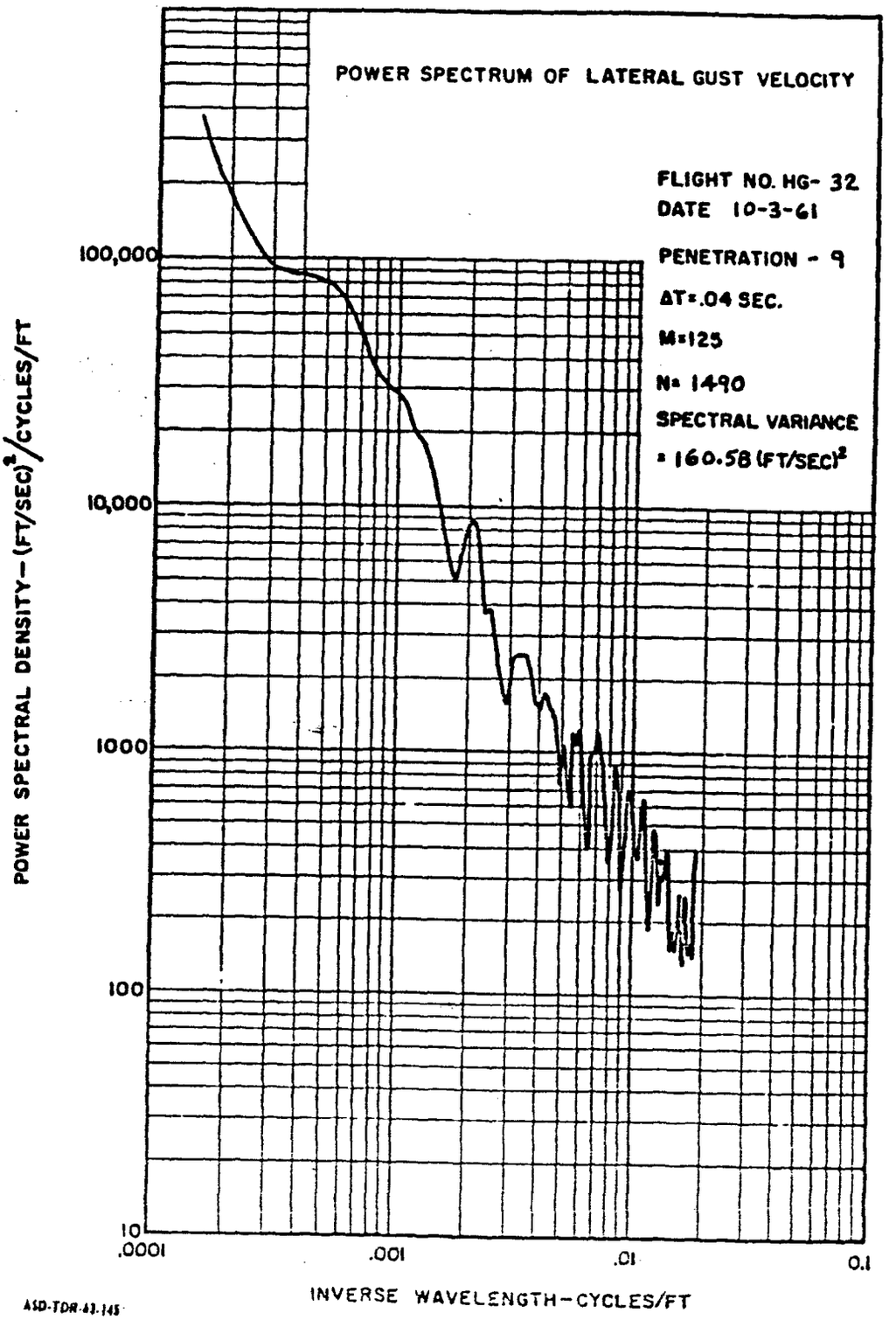

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 20.59 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

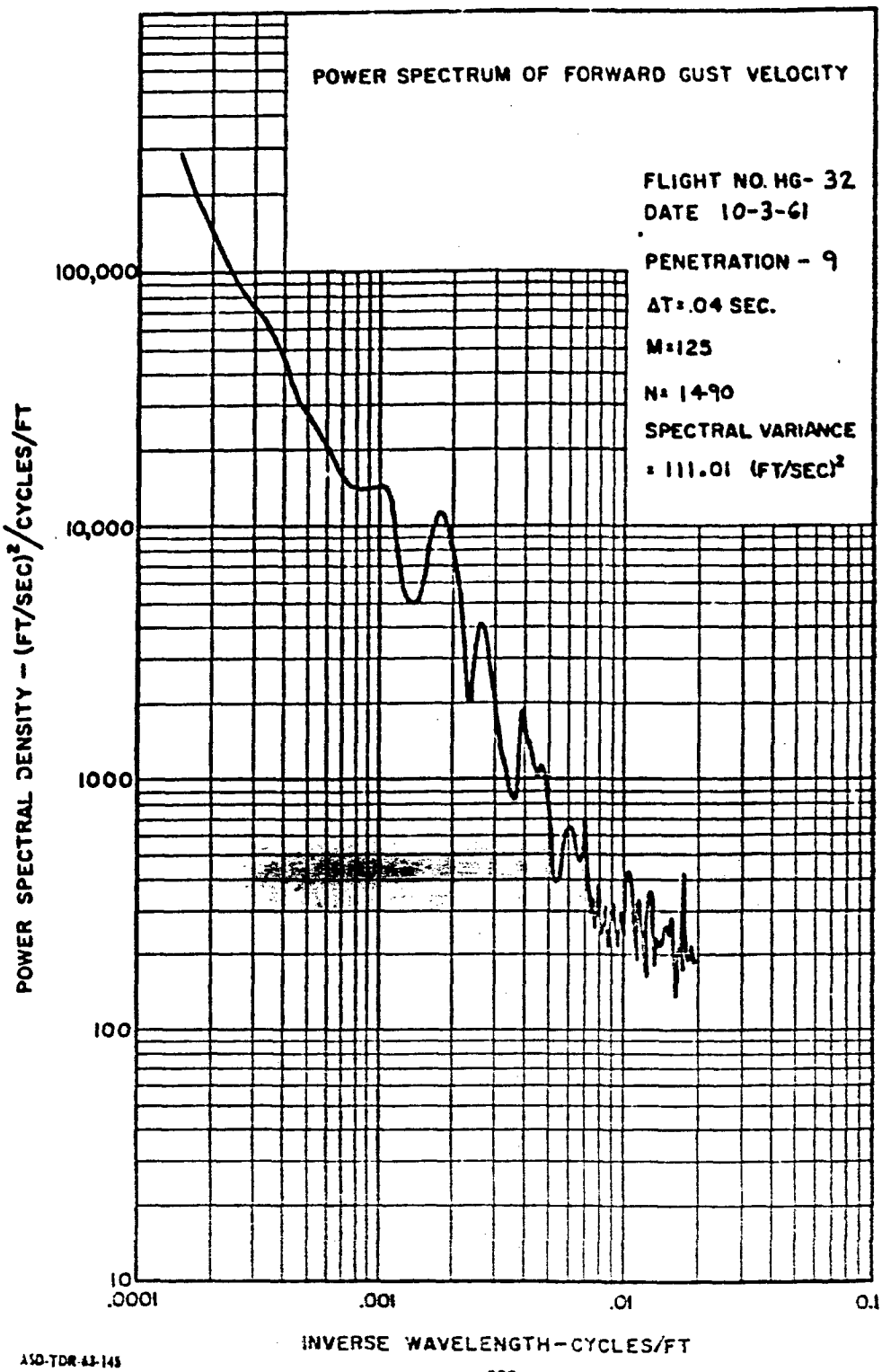

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 9.08 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

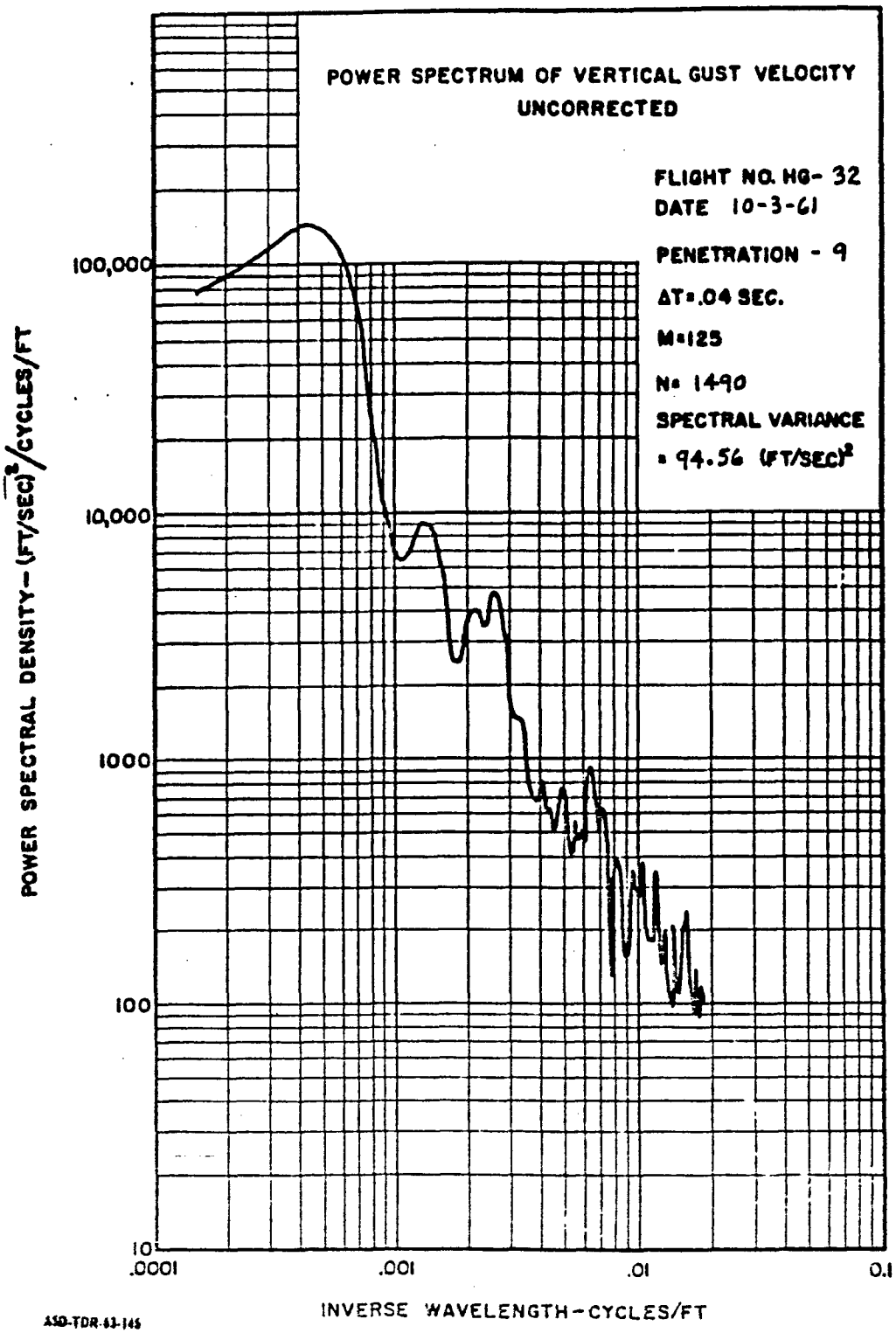

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 15.65 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

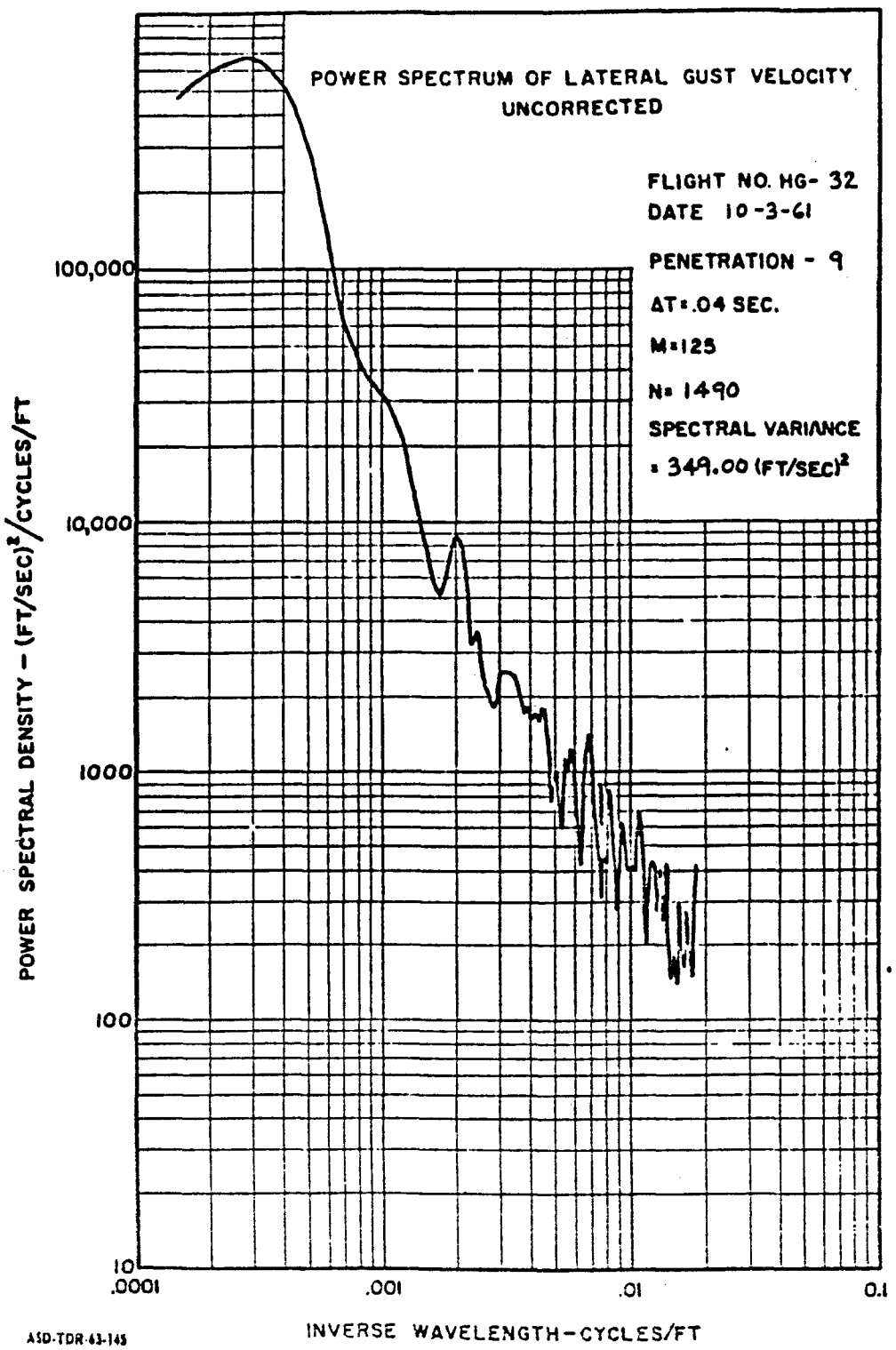

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 55.79 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

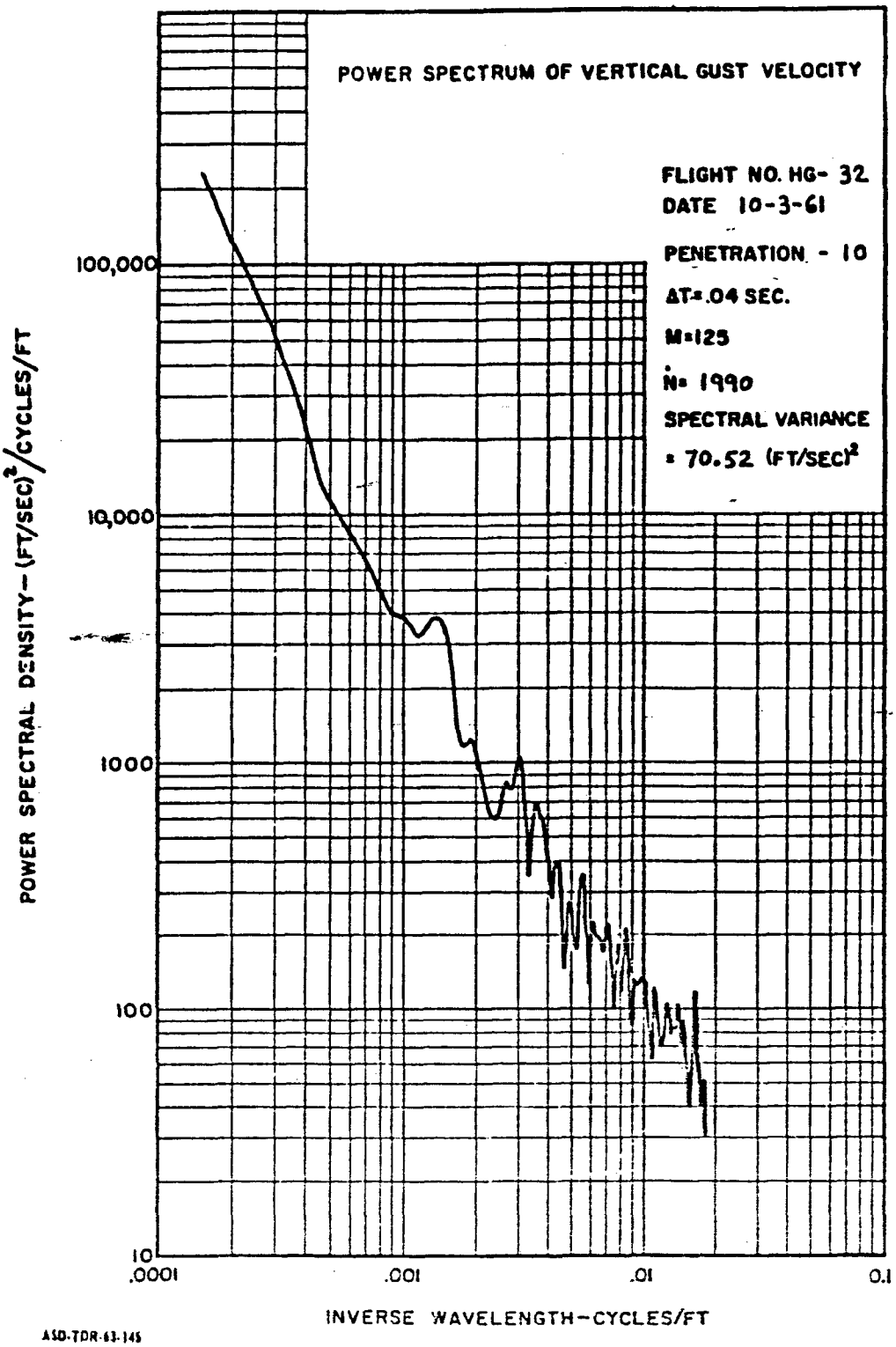

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 132.10 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

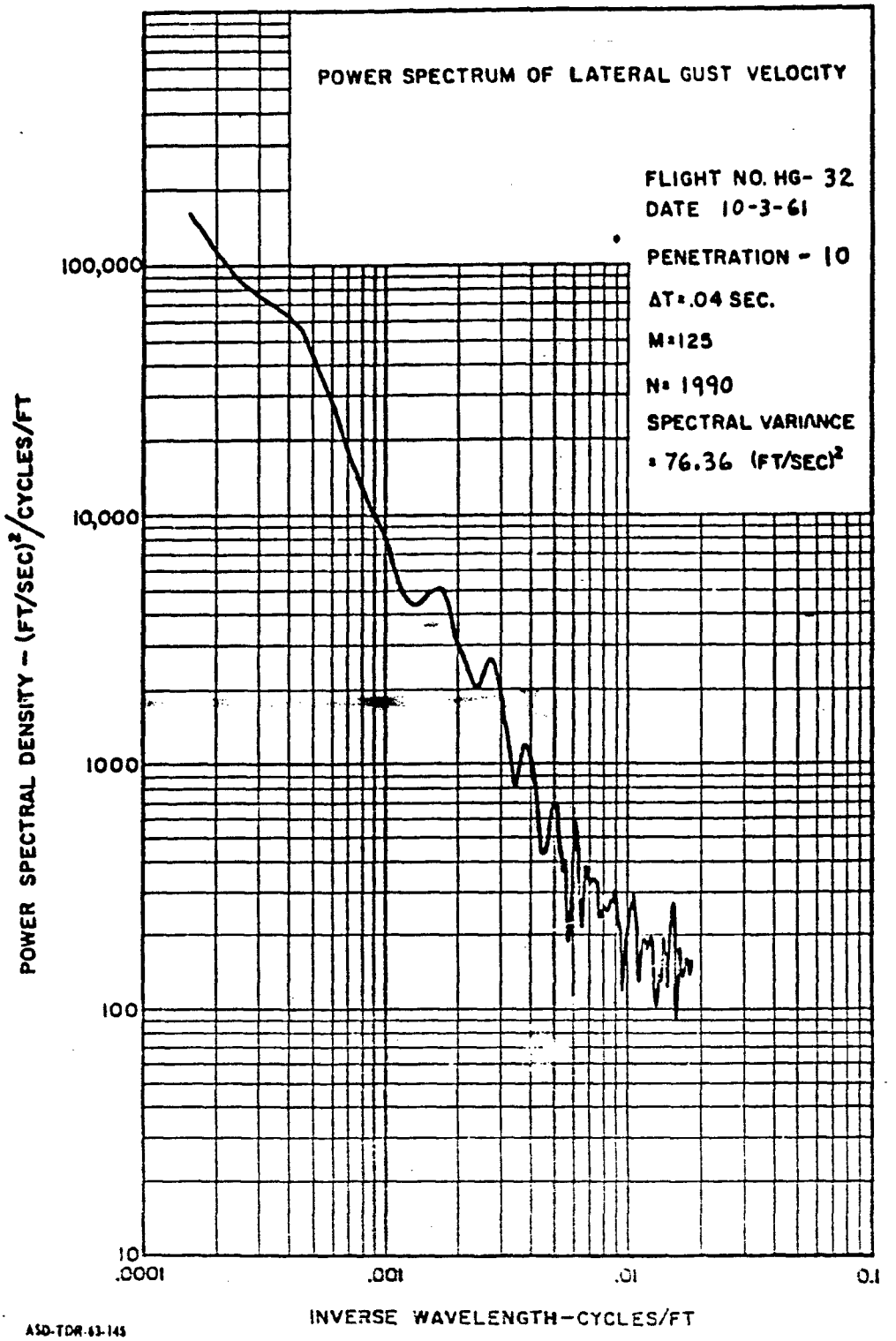

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 160.58 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

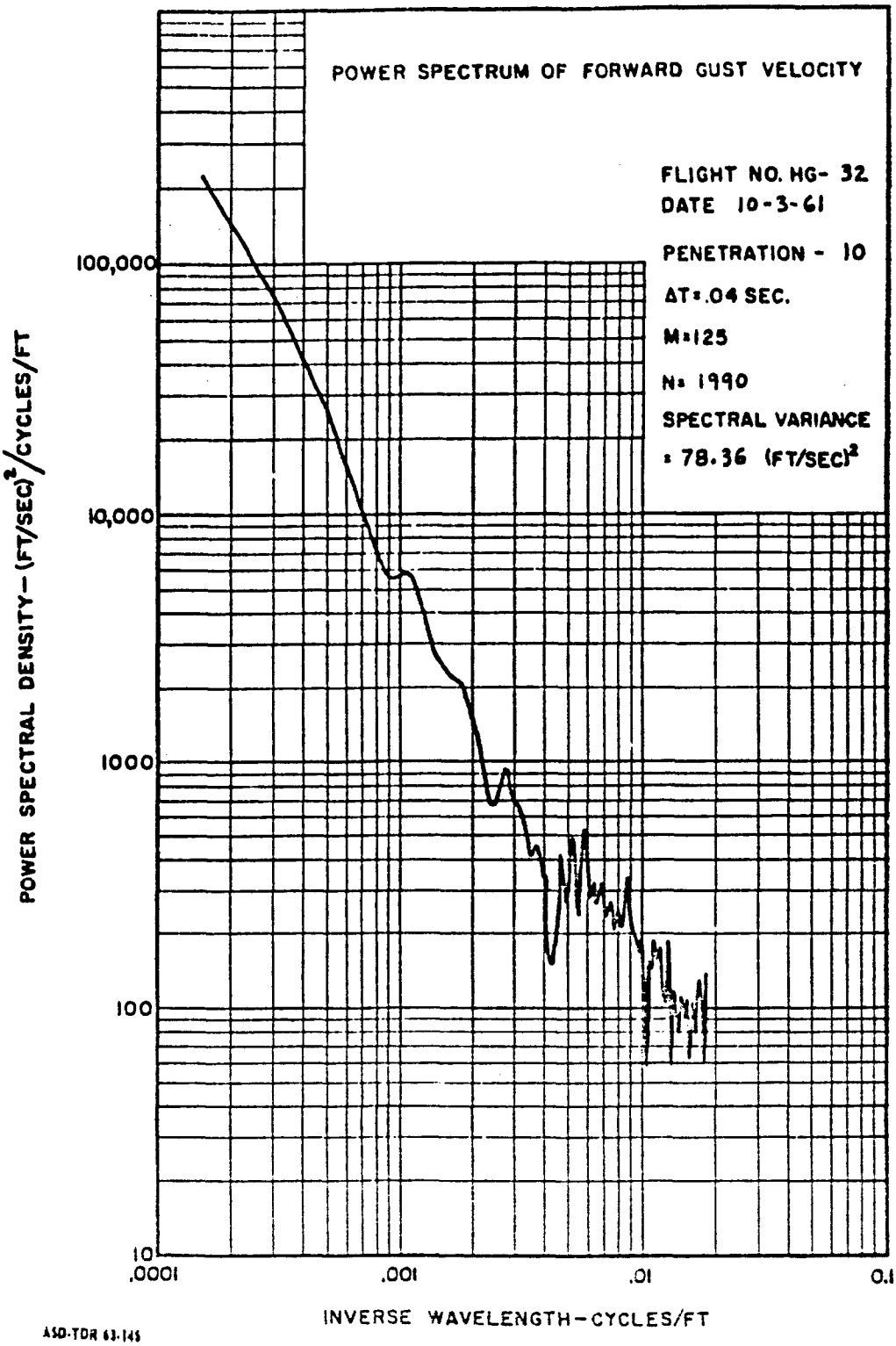

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 111.01 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

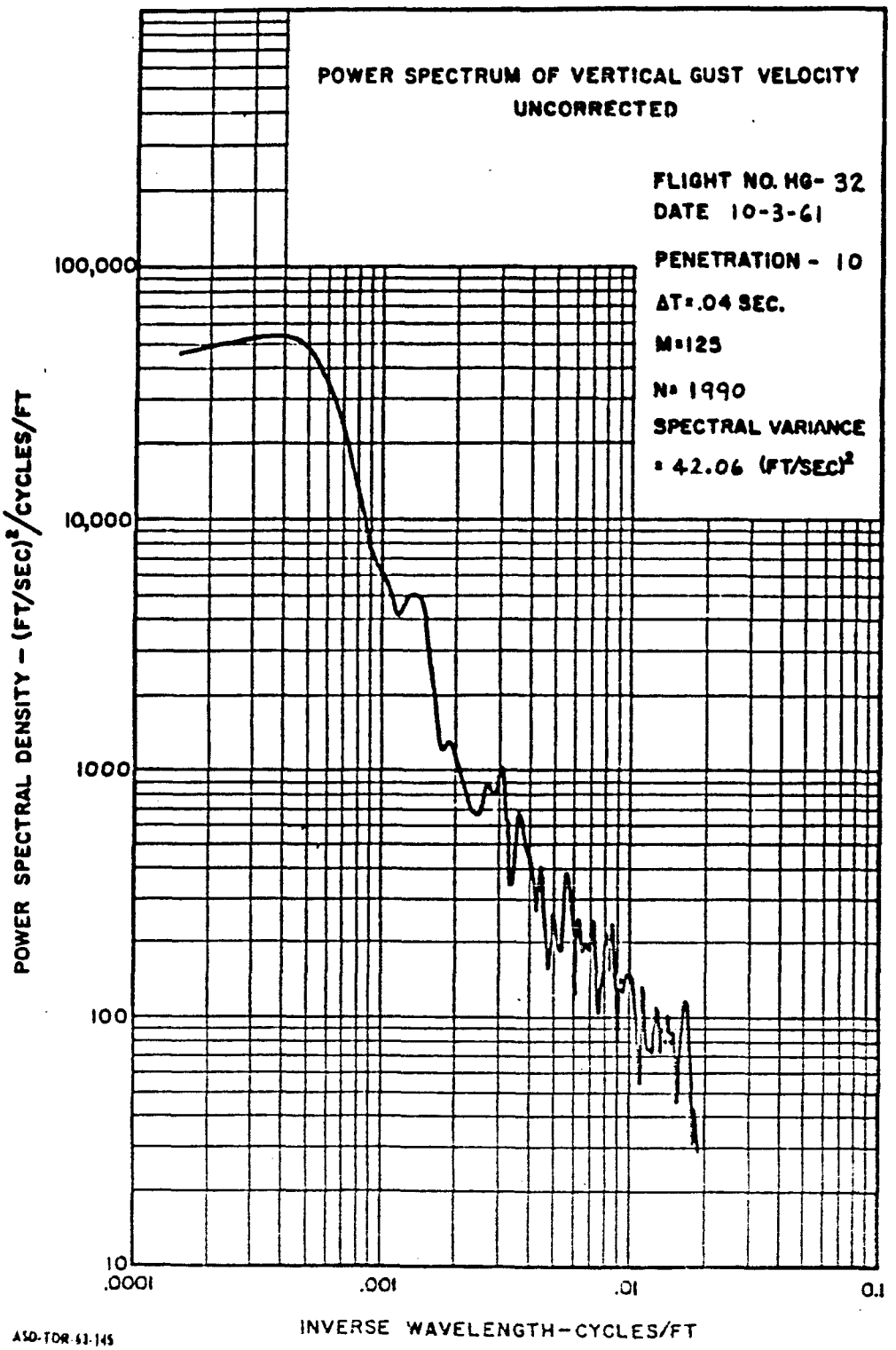

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 94.56 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

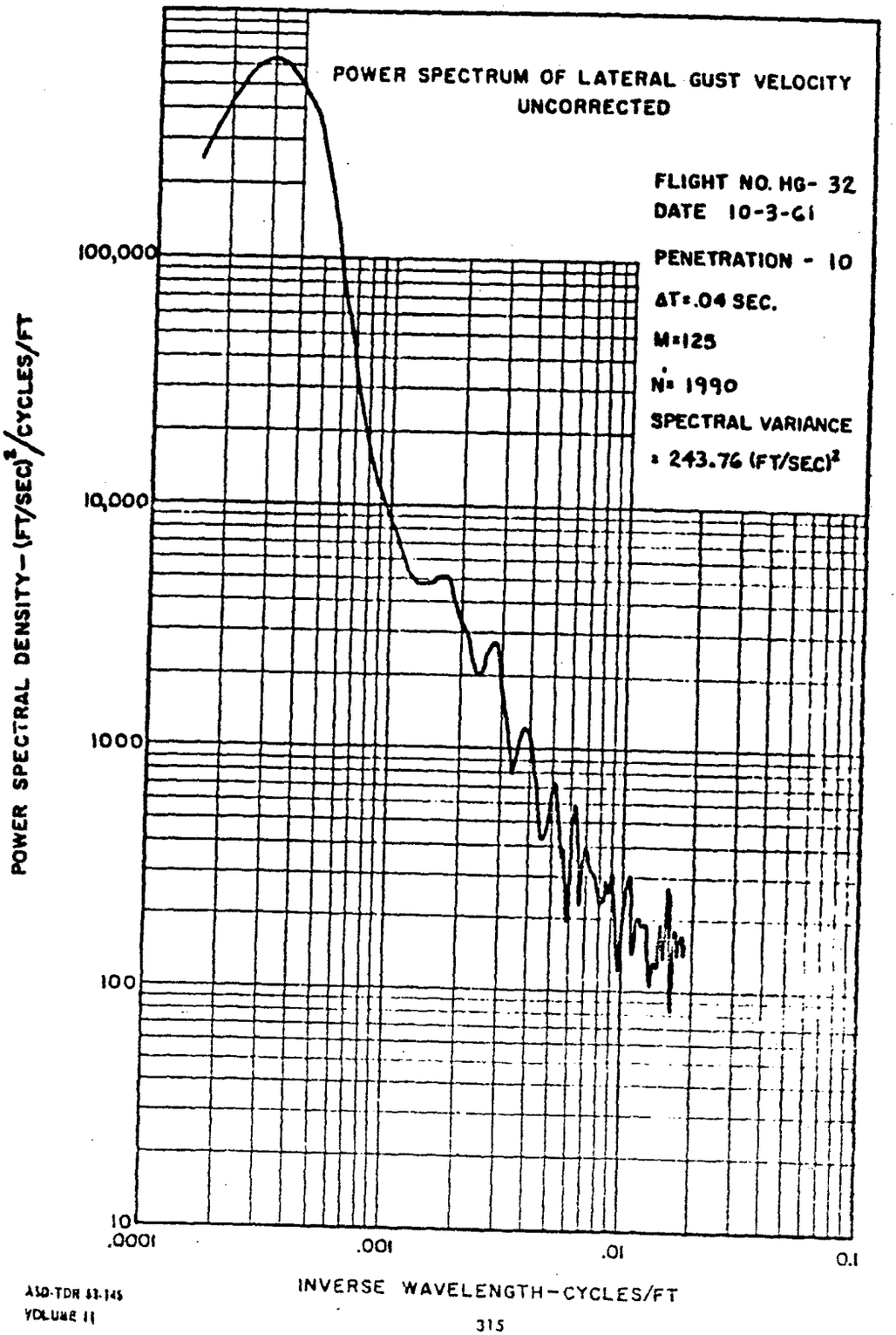

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1490
SPECTRAL VARIANCE
= 349.00 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

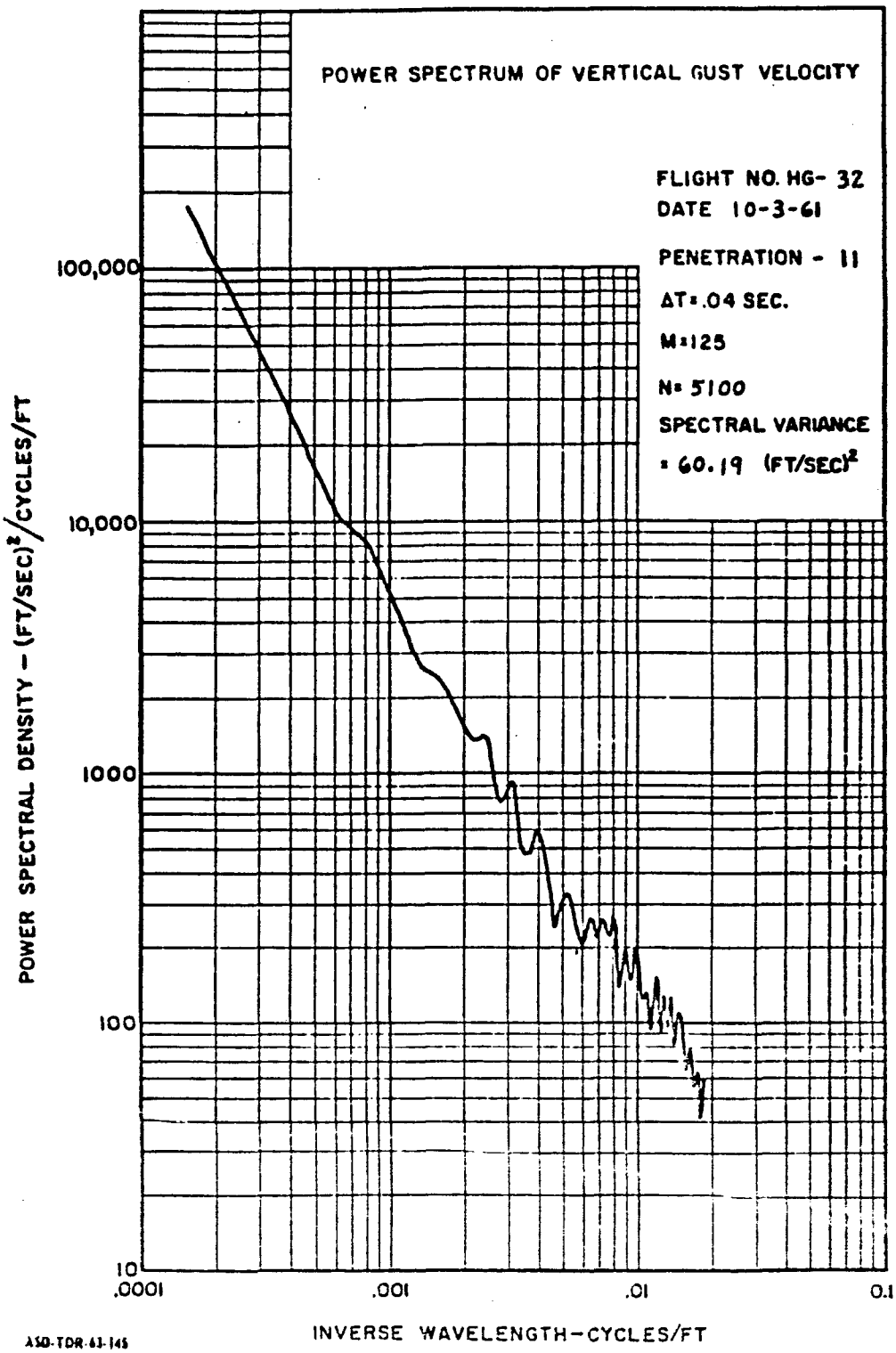

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 70.52 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

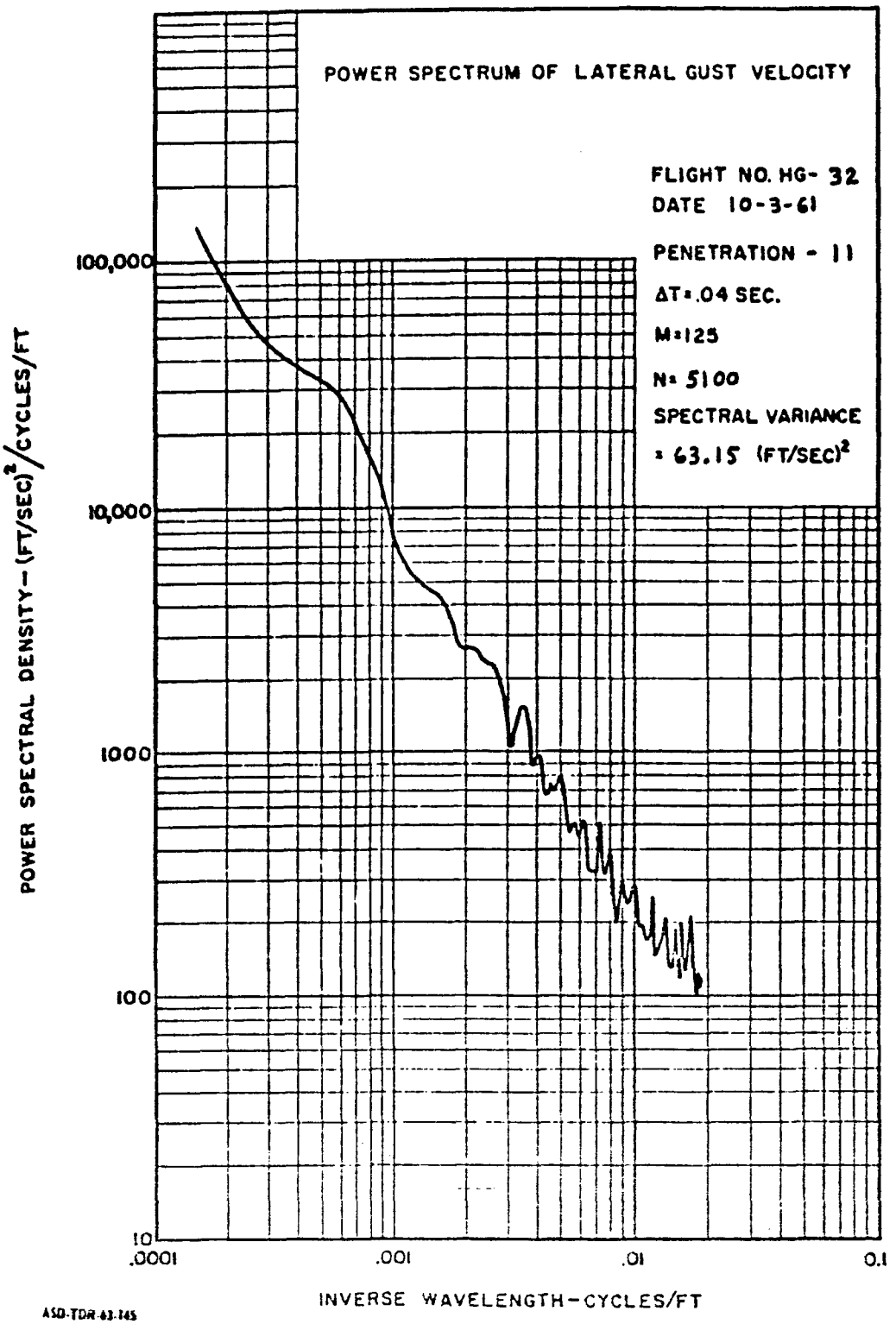

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 76.36 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

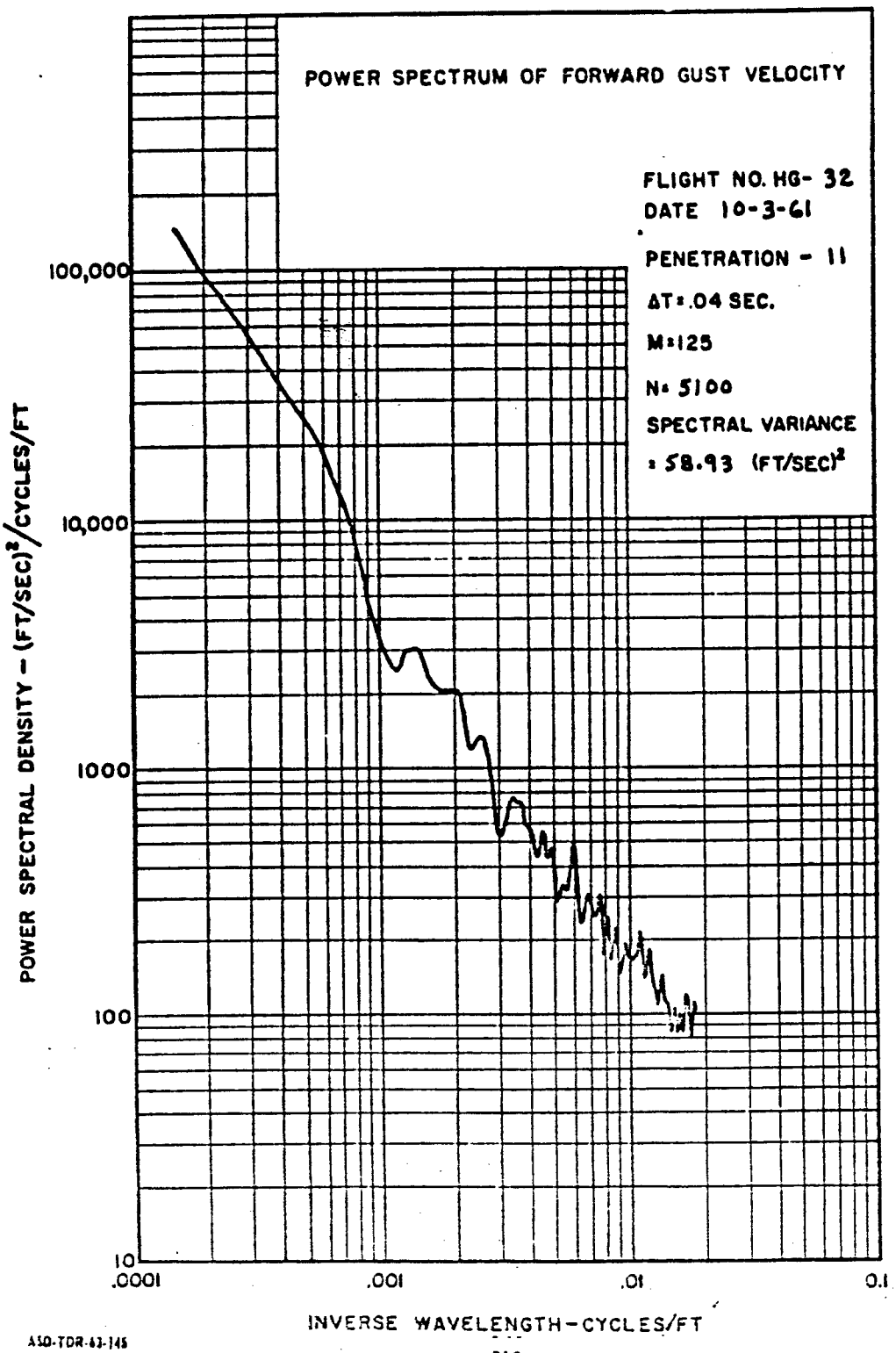

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 78.36 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

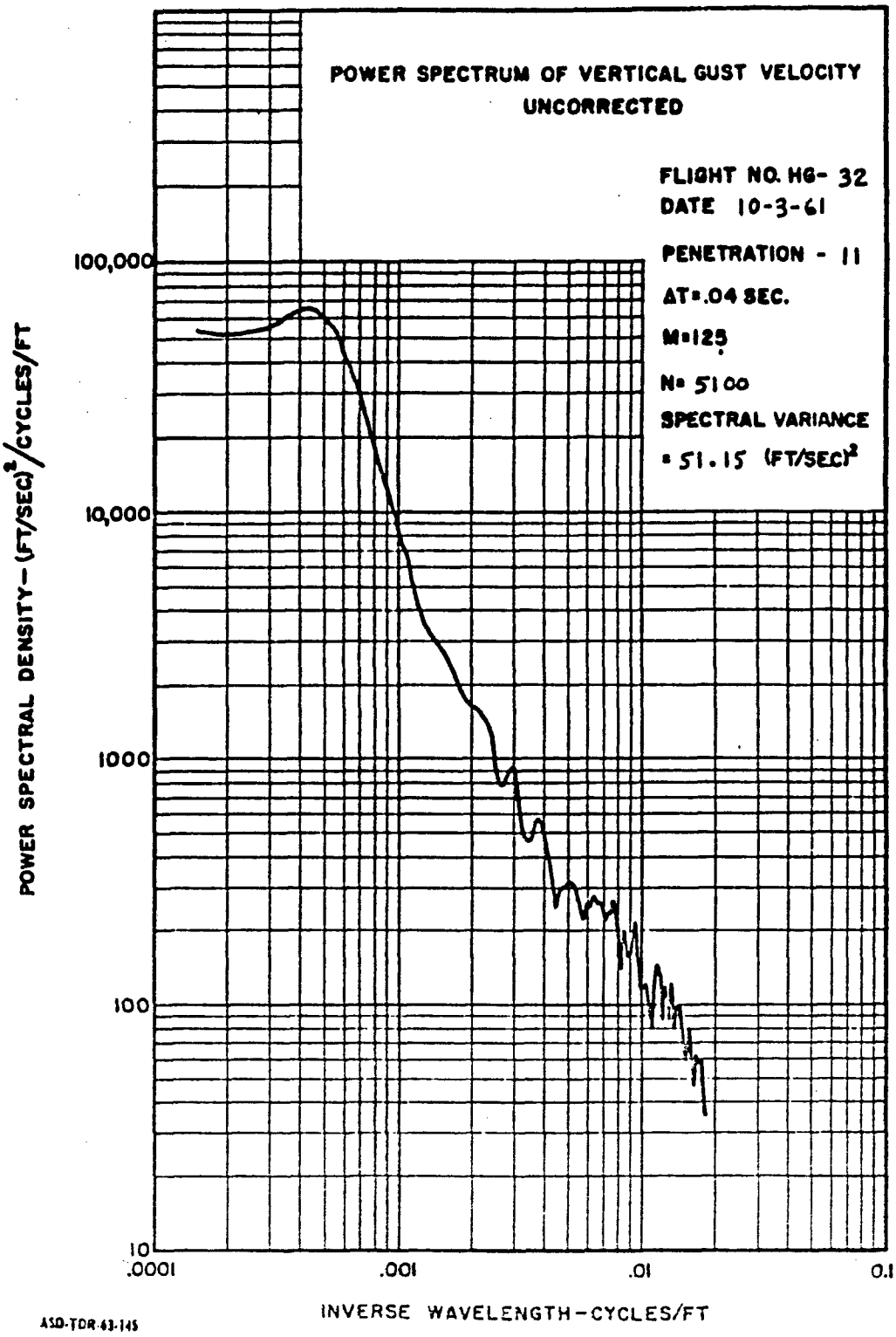

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 42.06 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

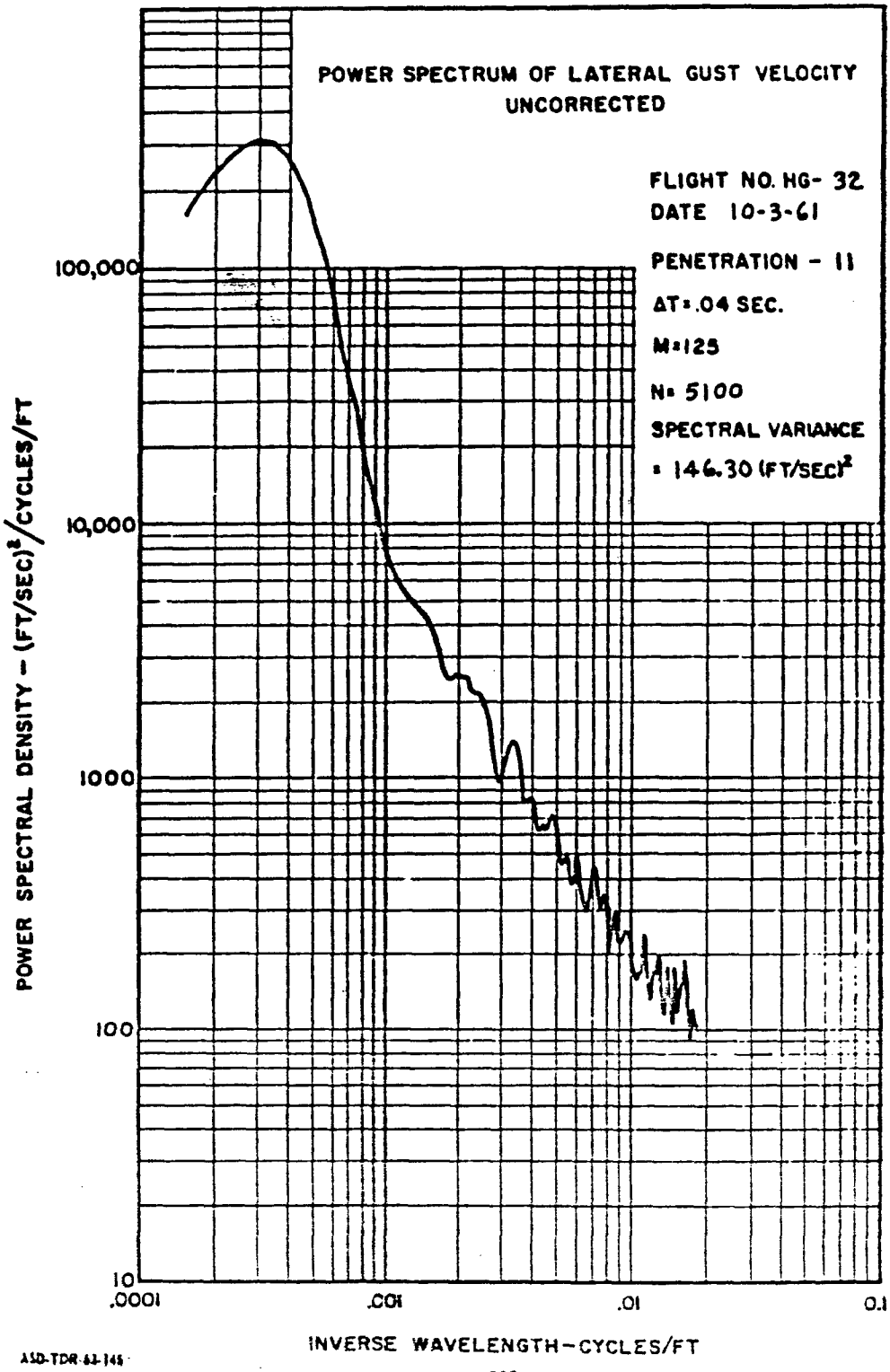

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 243.76 (FT/SEC)²
POWER SPECTRAL DENSITY—(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH—CYCLES/FT

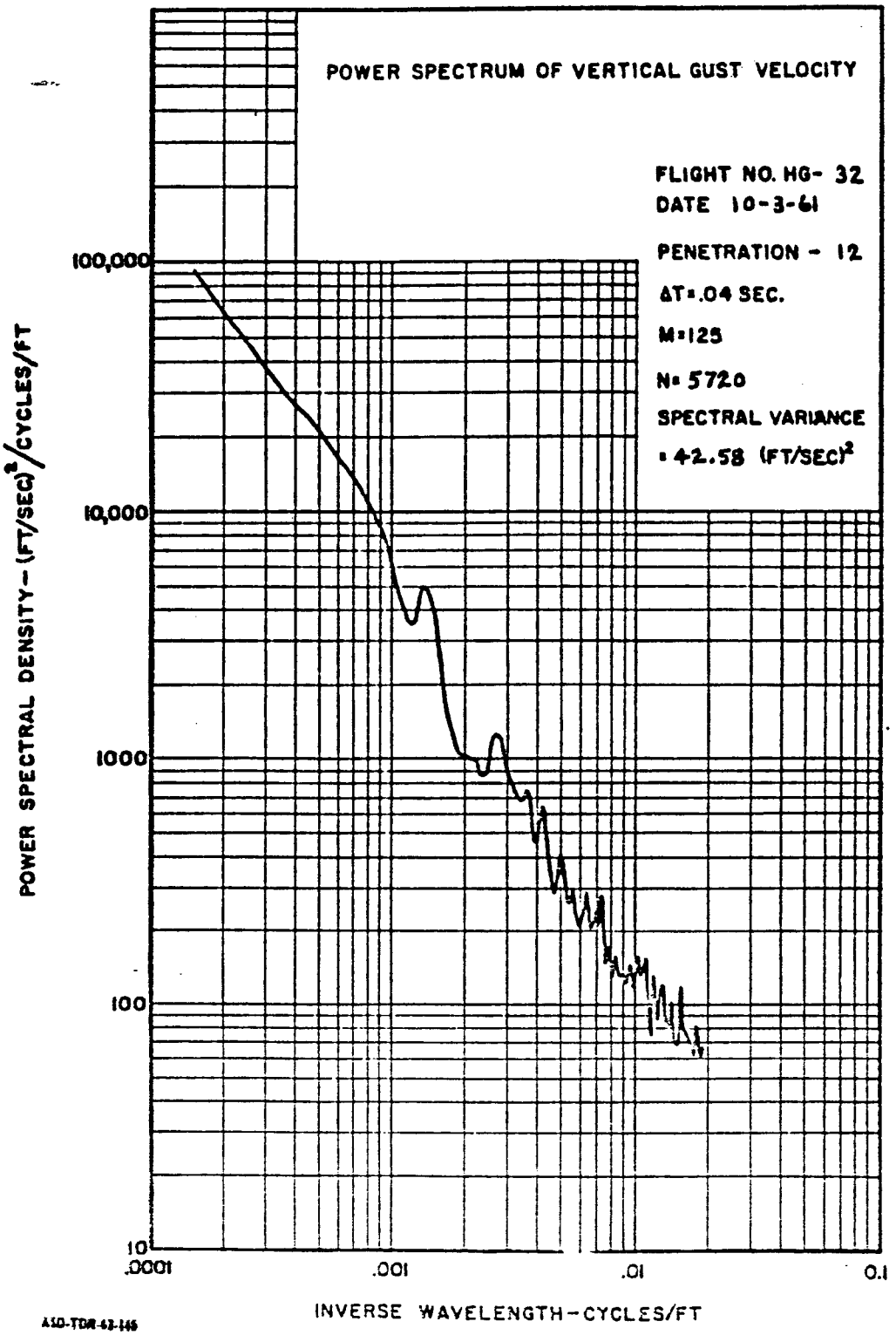

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 5100
SPECTRAL VARIANCE
= 60.19 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

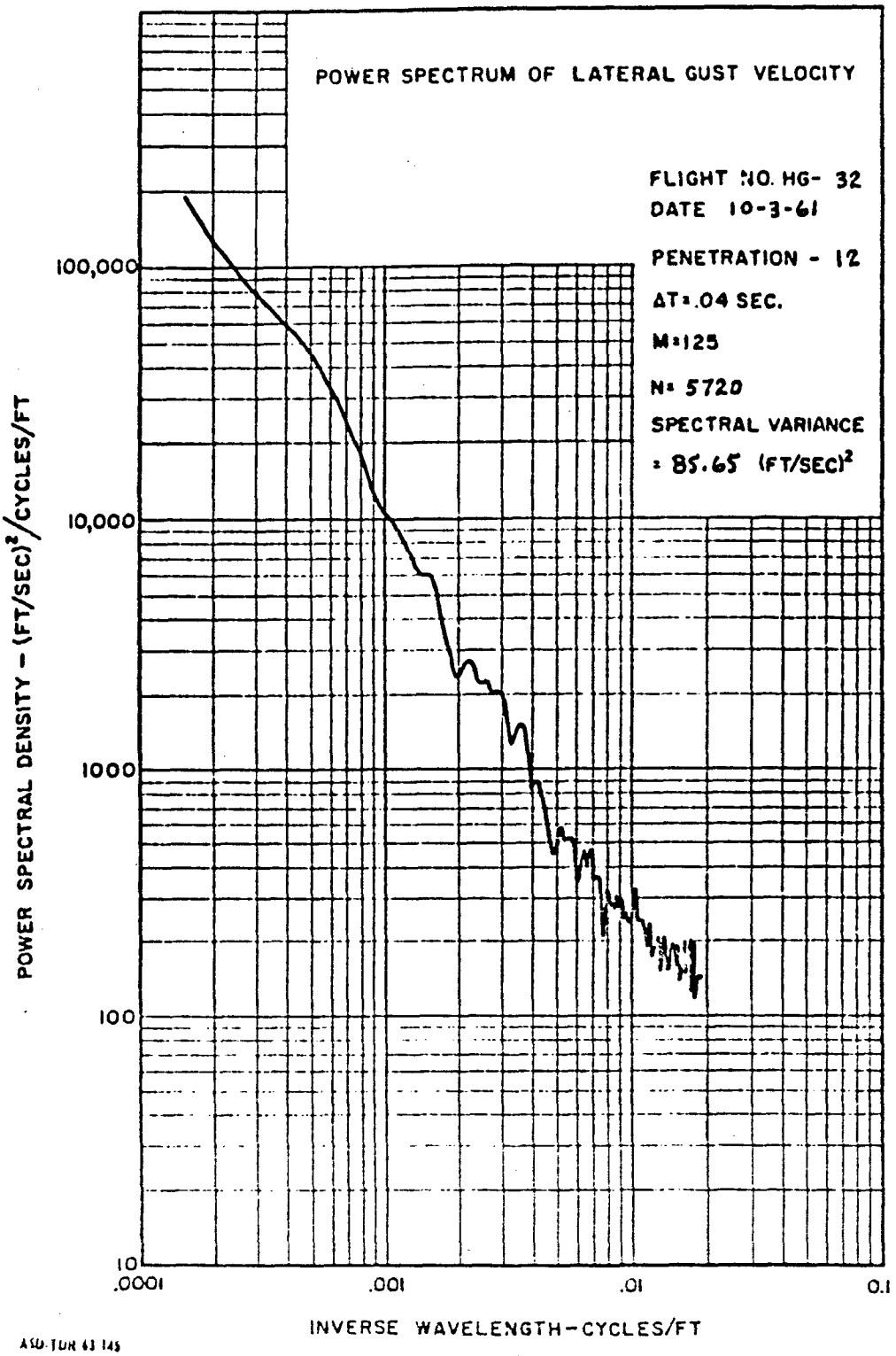

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 5100
SPECTRAL VARIANCE
= 63.15 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

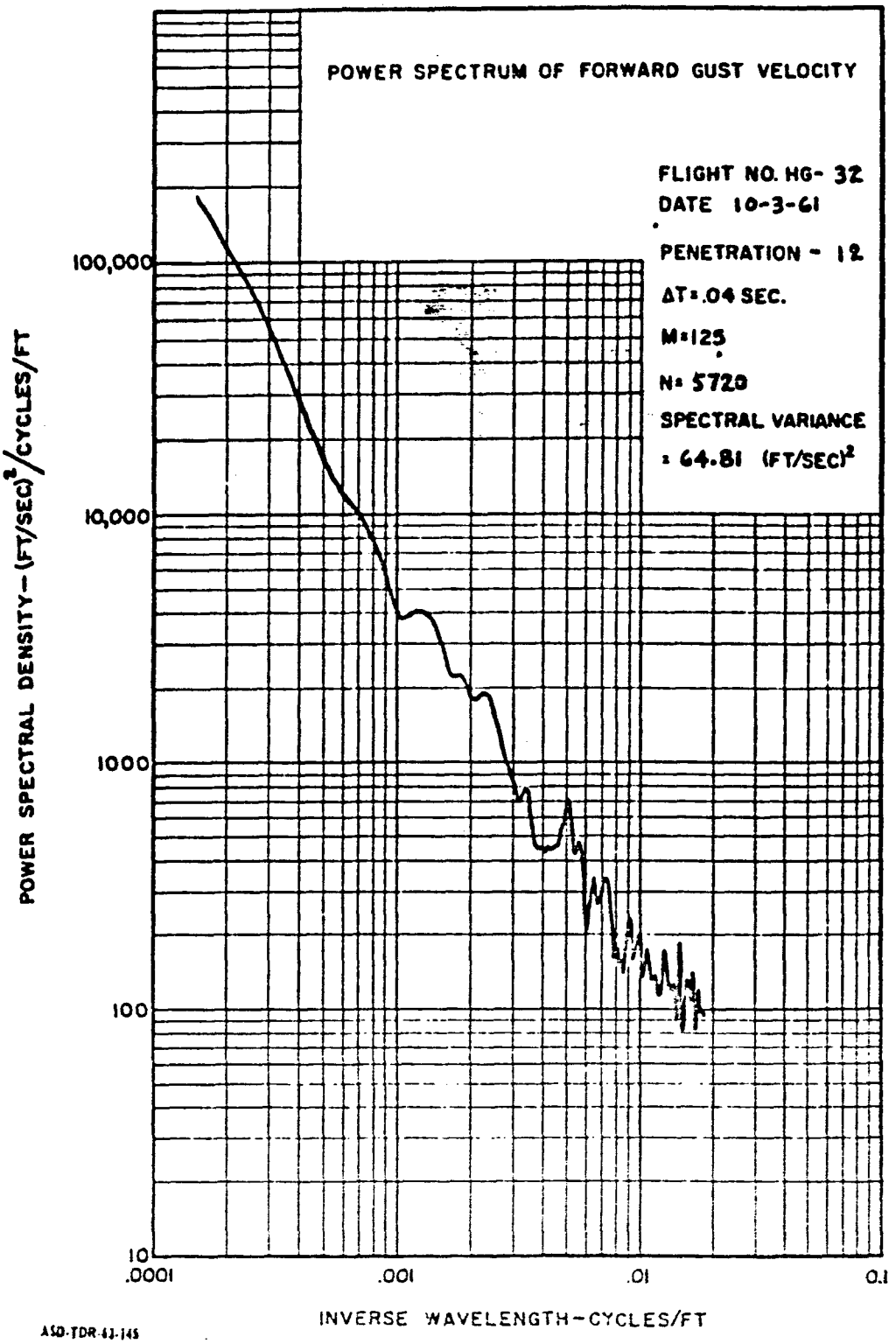

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 11
ΔT = .04 SEC.
M = 125
N = 5100
SPECTRAL VARIANCE
= 58.93 (FT/SEC)²
100,000
10,000
1000
100
10
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

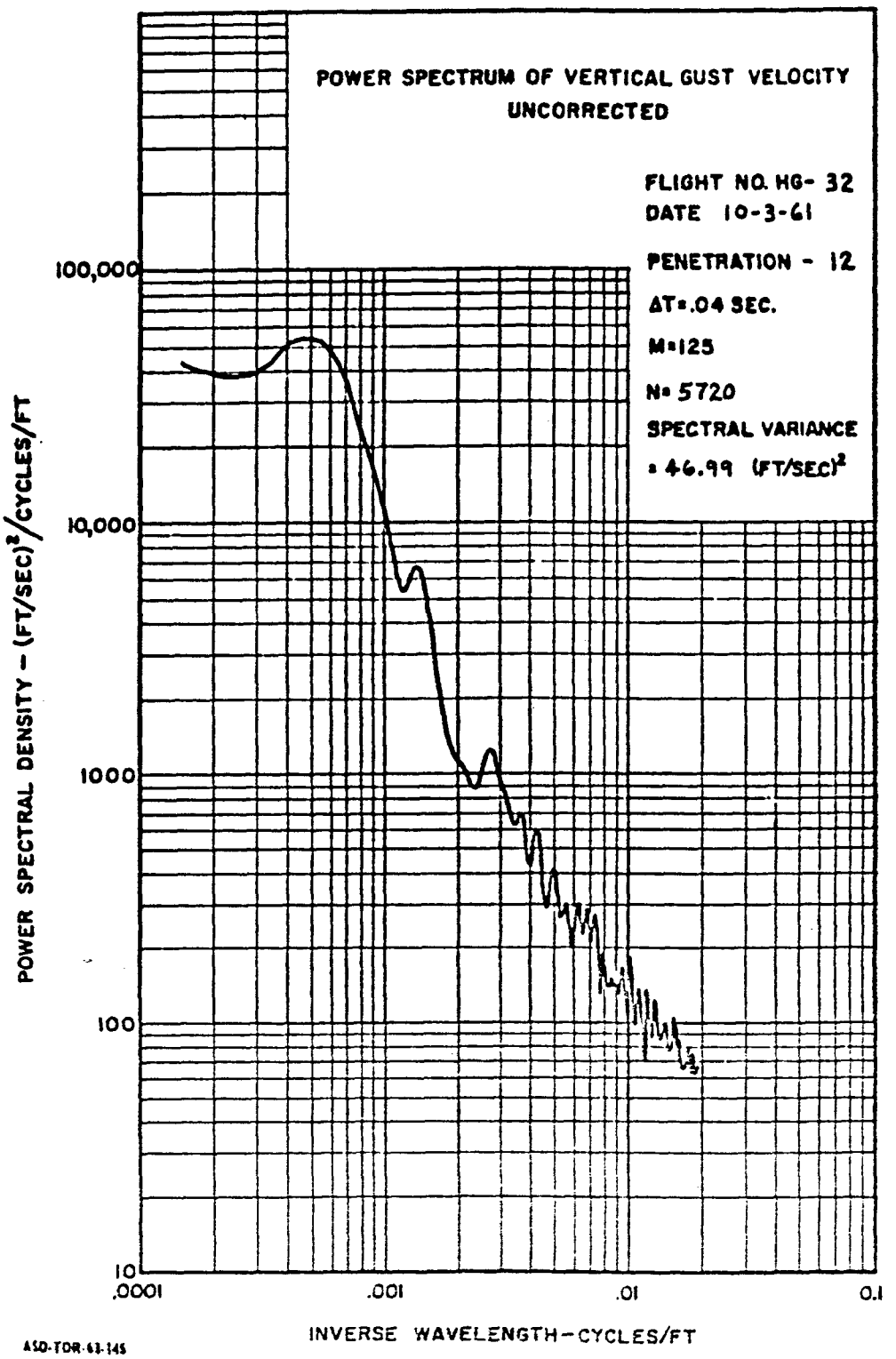

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 5100
SPECTRAL VARIANCE
= 51.15 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

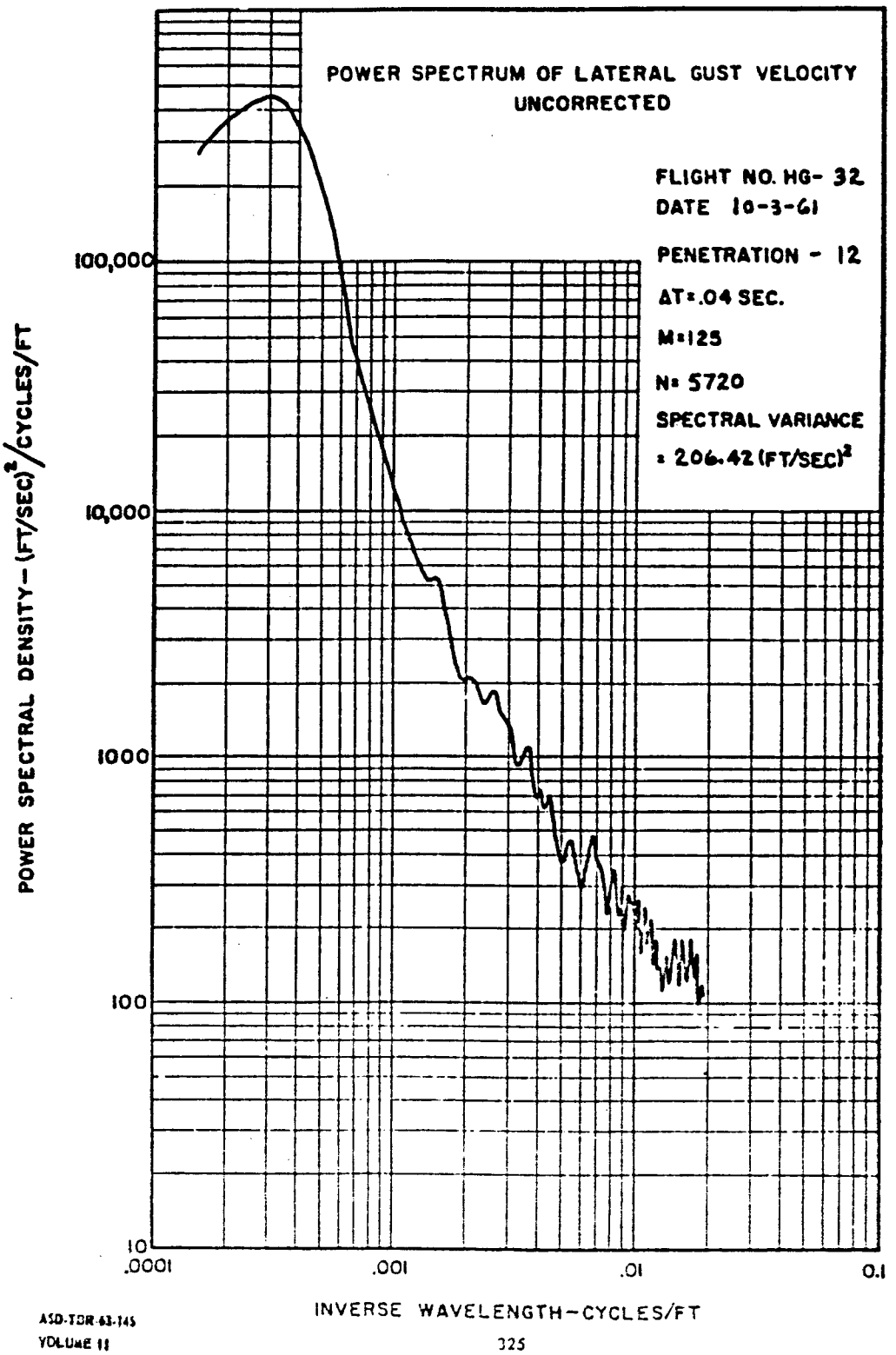

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 5100
SPECTRAL VARIANCE
= 146.30 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

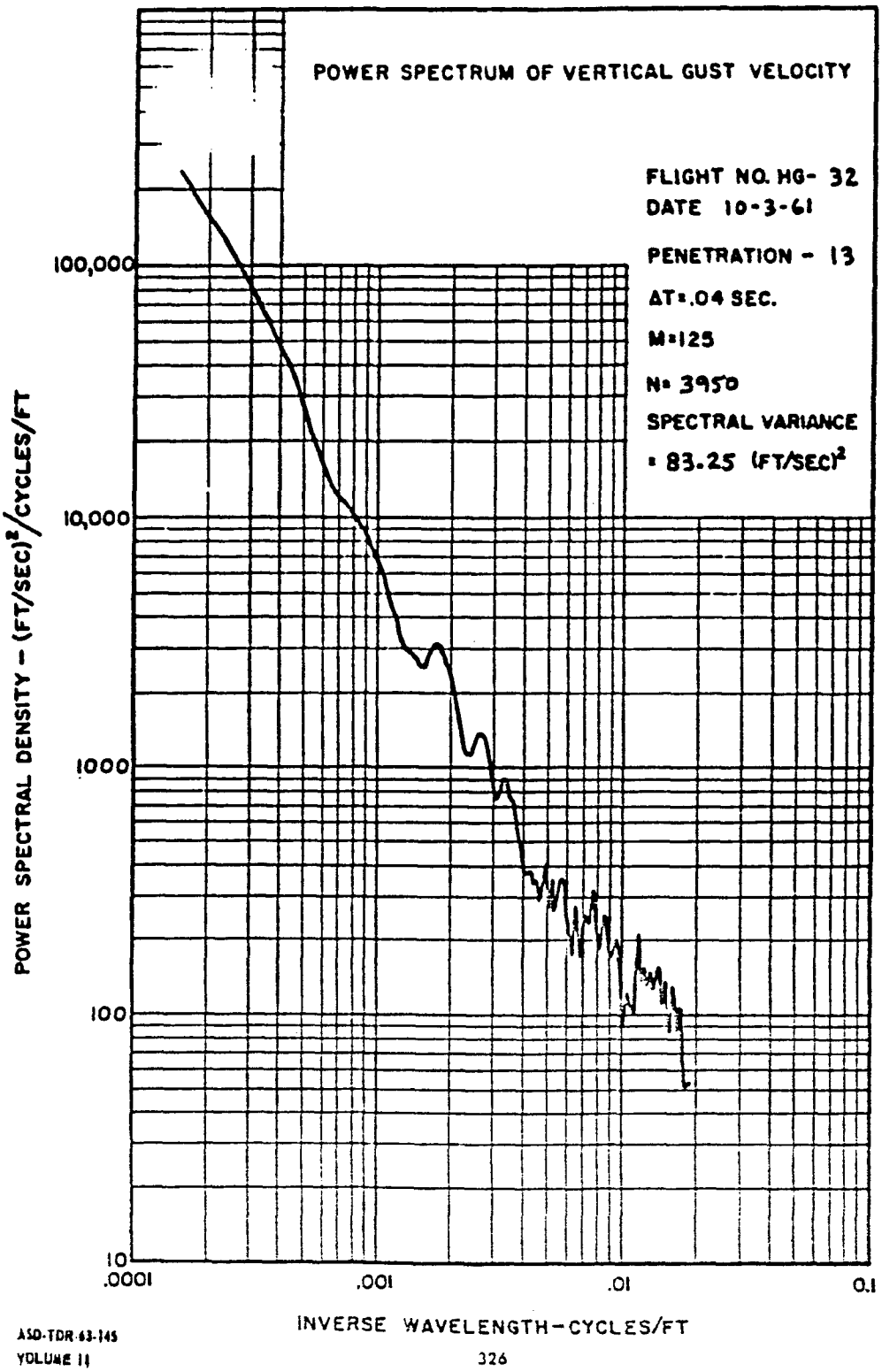

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 5720
SPECTRAL VARIANCE
= 42.58 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

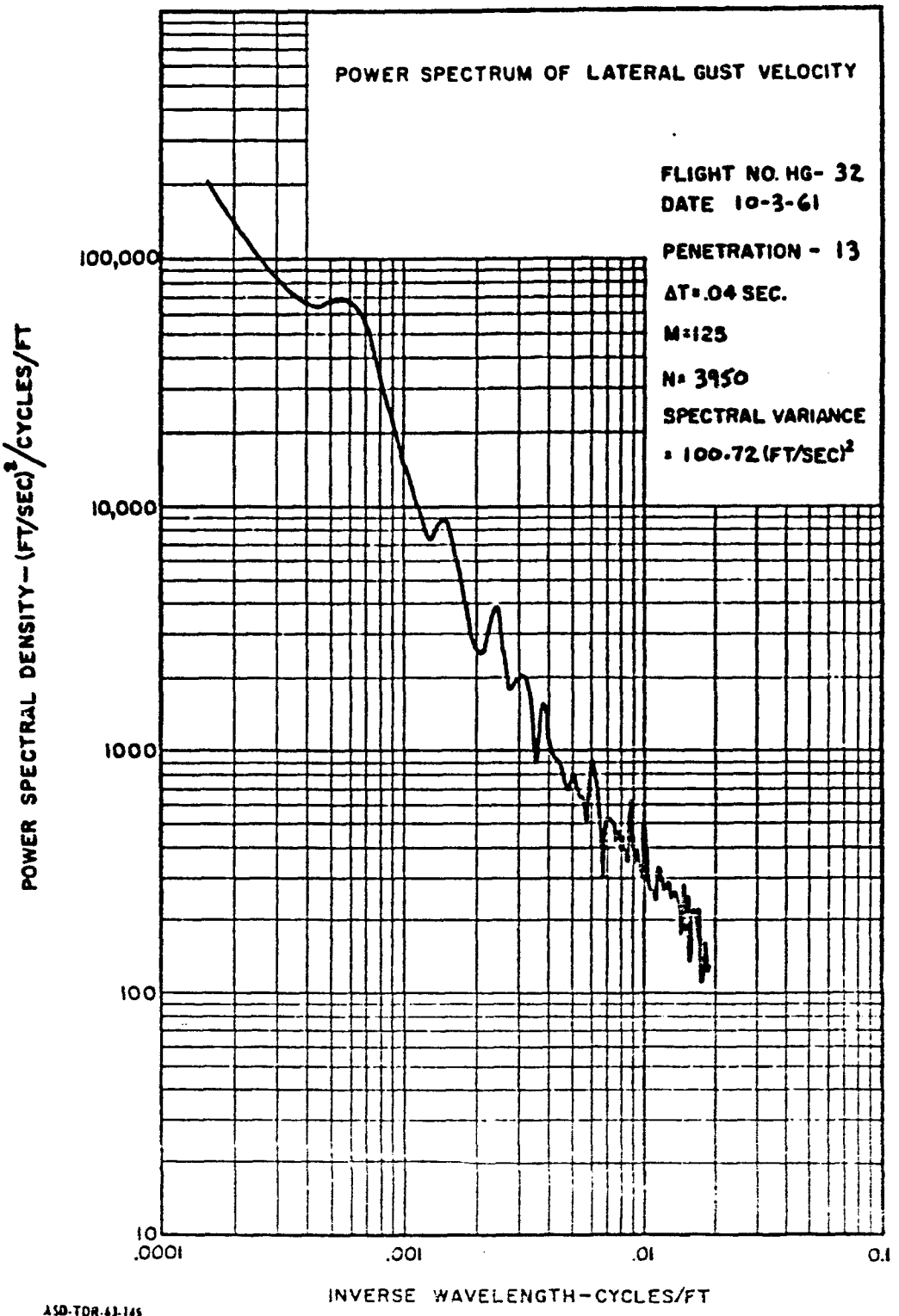

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 5720
SPECTRAL VARIANCE
= 85.65 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

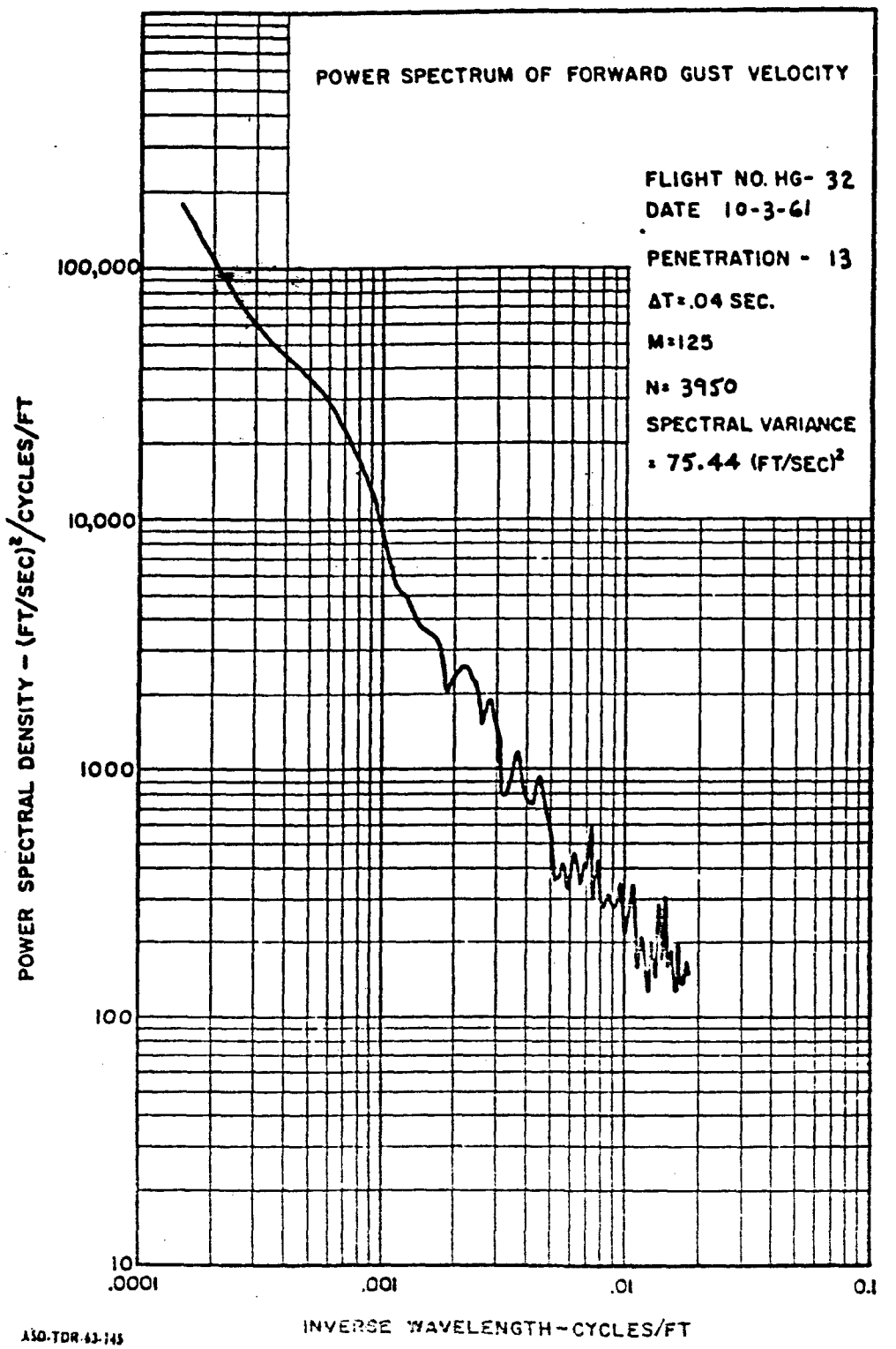

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 5720
SPECTRAL VARIANCE
= 64.81 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

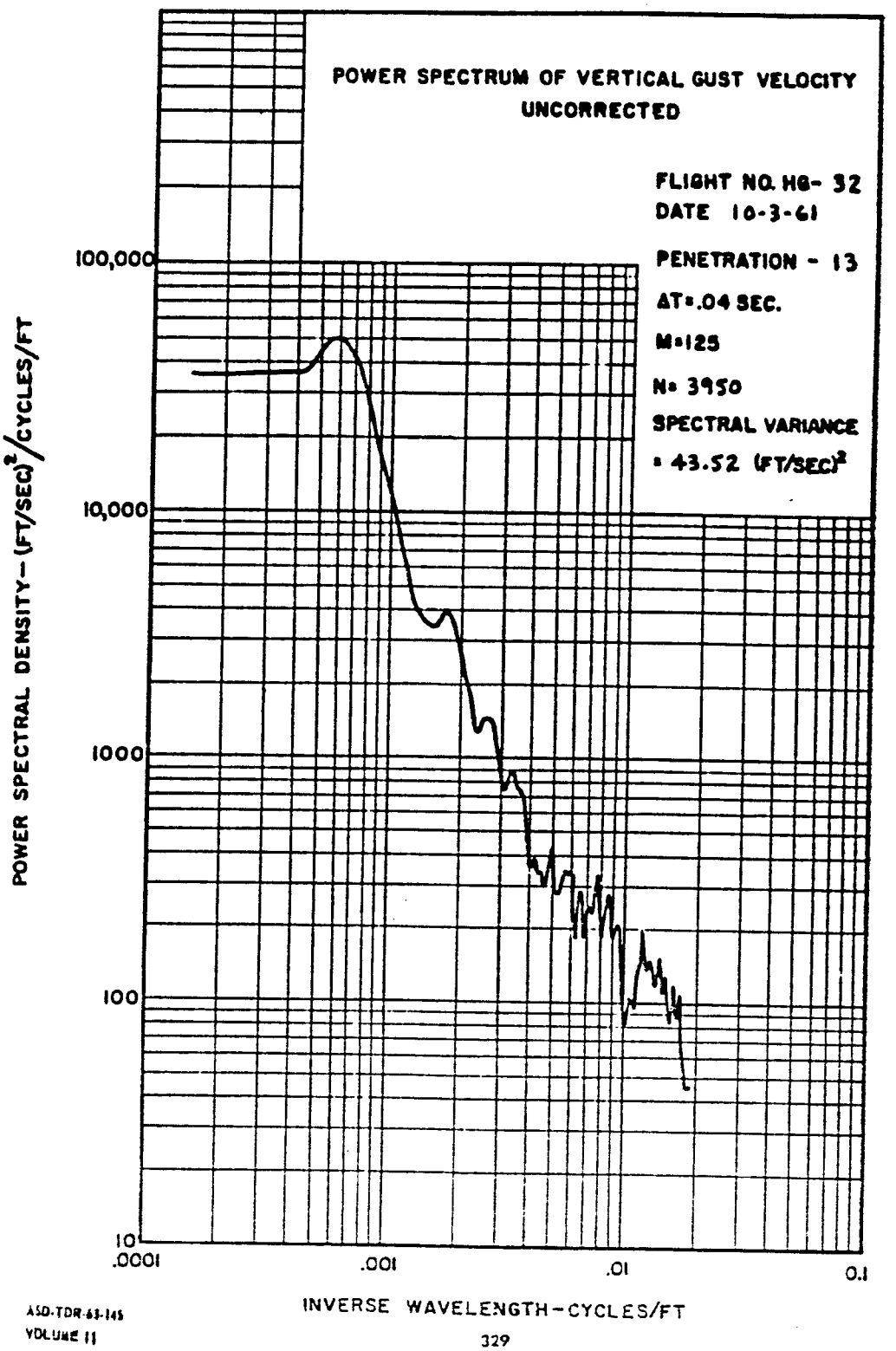

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 5720
SPECTRAL VARIANCE
= 46.99 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

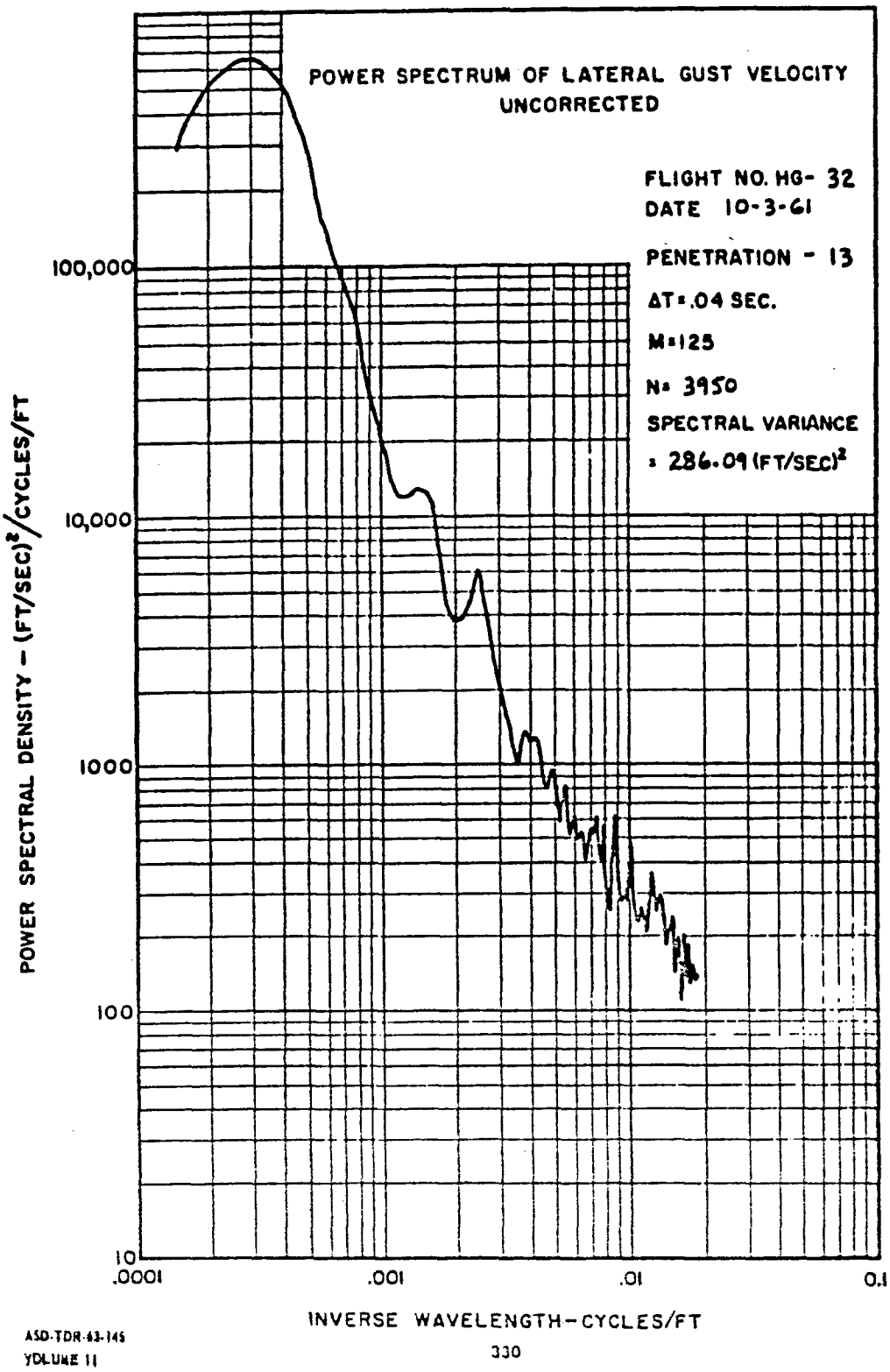

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 12
ΔT=.04 SEC.
M=125
N= 5720
SPECTRAL VARIANCE
= 206.42 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

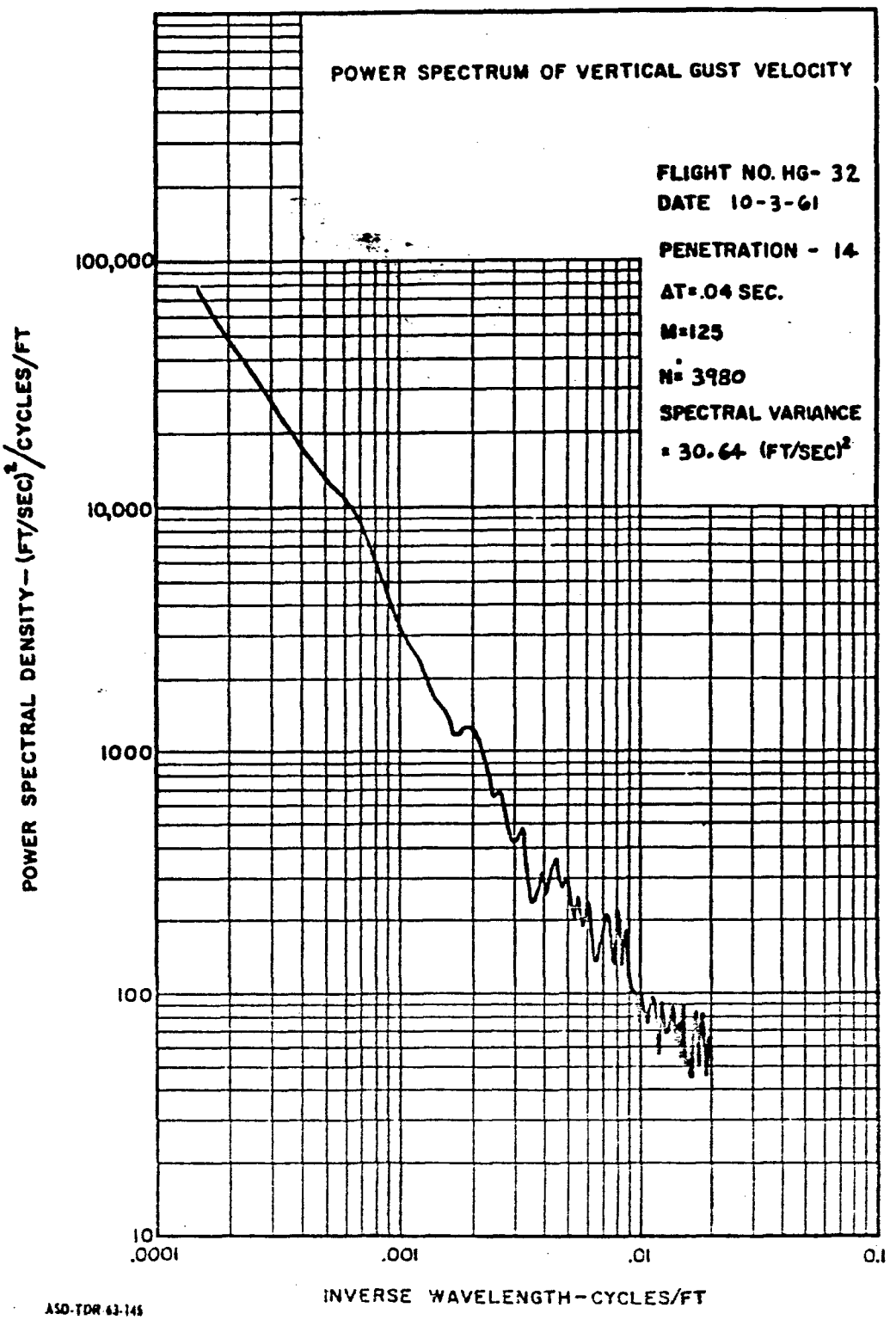

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 3950
SPECTRAL VARIANCE
= 83.25 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

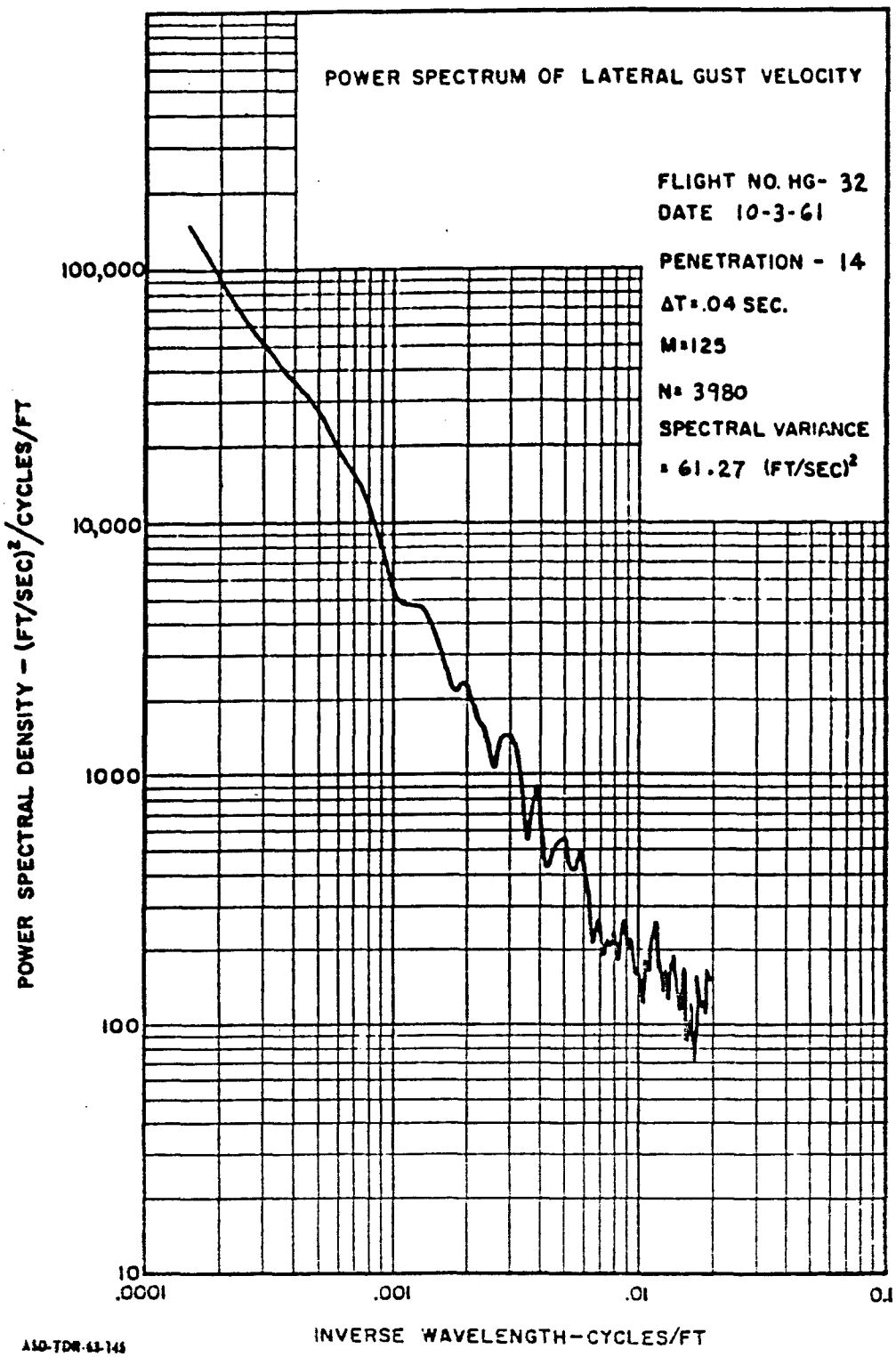

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 3950
SPECTRAL VARIANCE
= 100.72 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

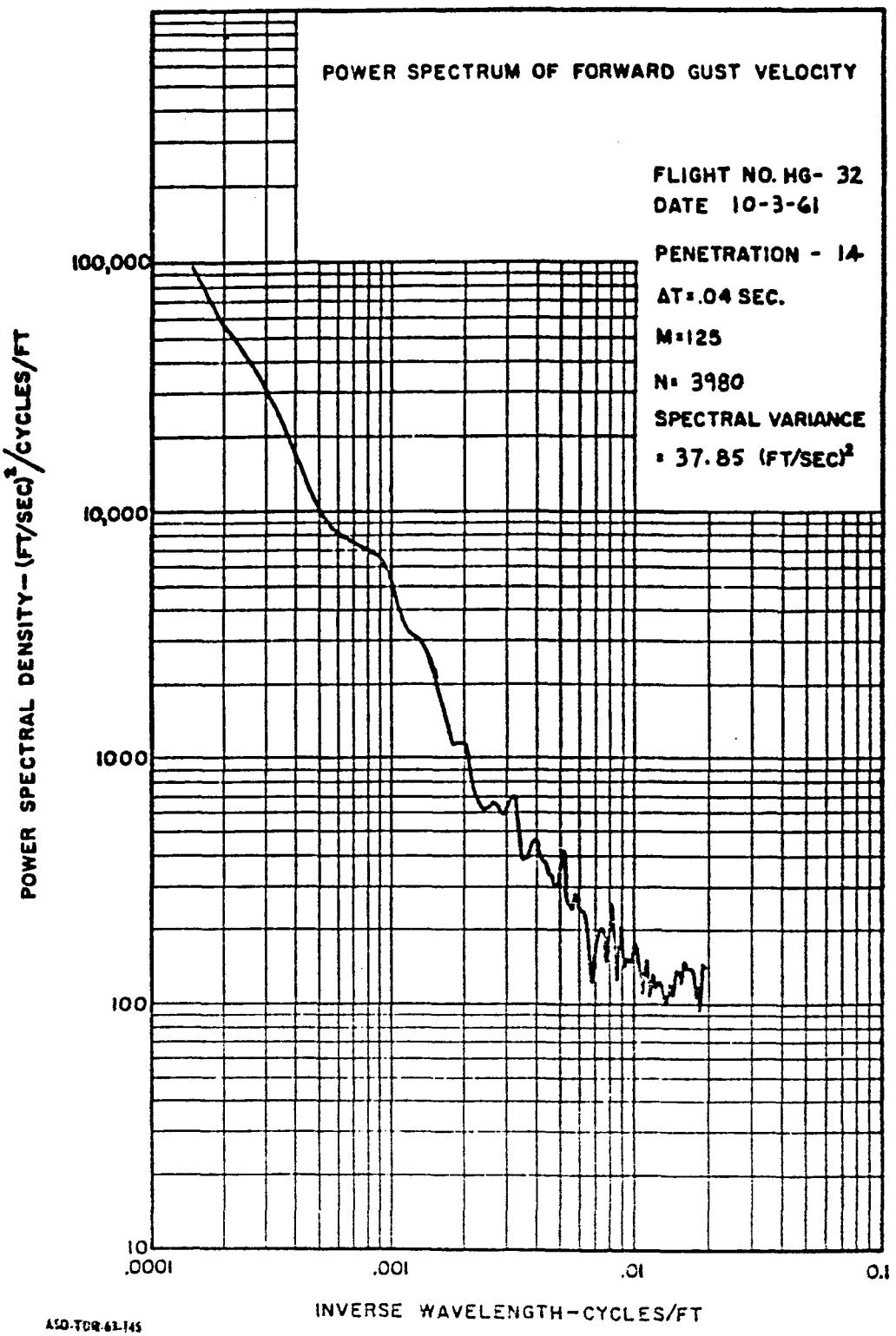

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 3950
SPECTRAL VARIANCE
= 75.44 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

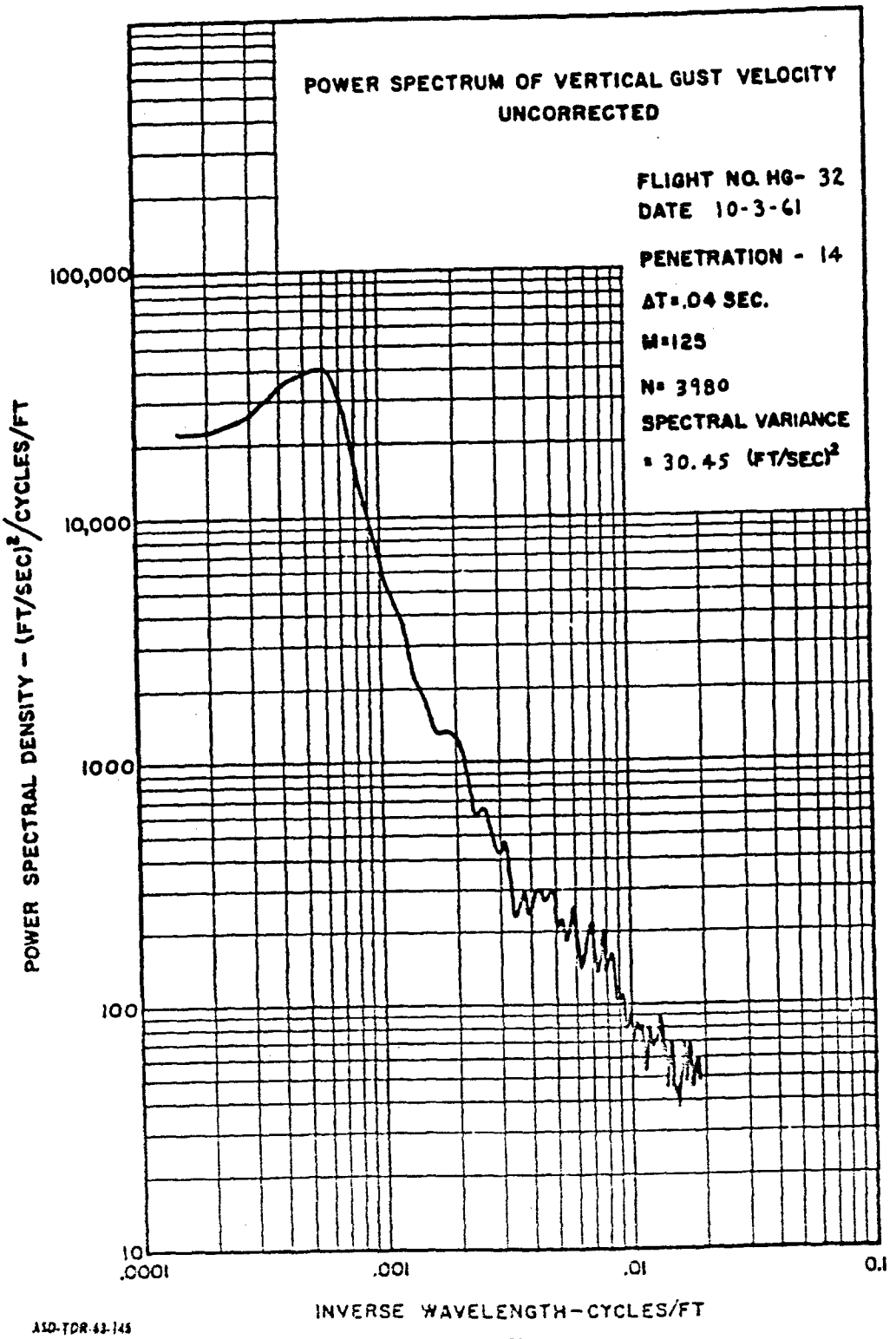

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 13
ΔT=.04 SEC.
M=125
N= 3950
SPECTRAL VARIANCE
= 43.52 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

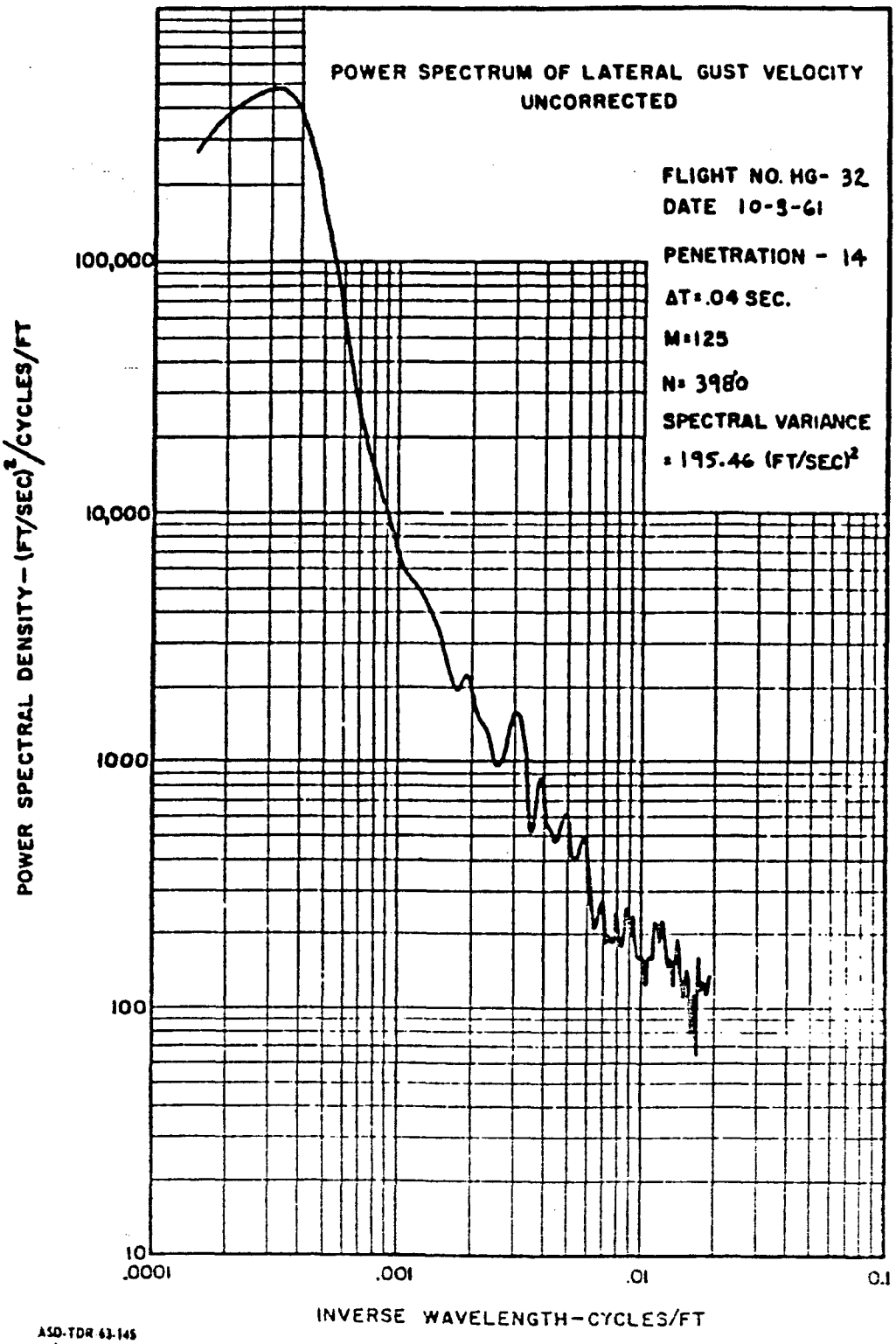

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 13
ΔT = .04 SEC.
M = 125
N = 3950
SPECTRAL VARIANCE
= 286.09 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

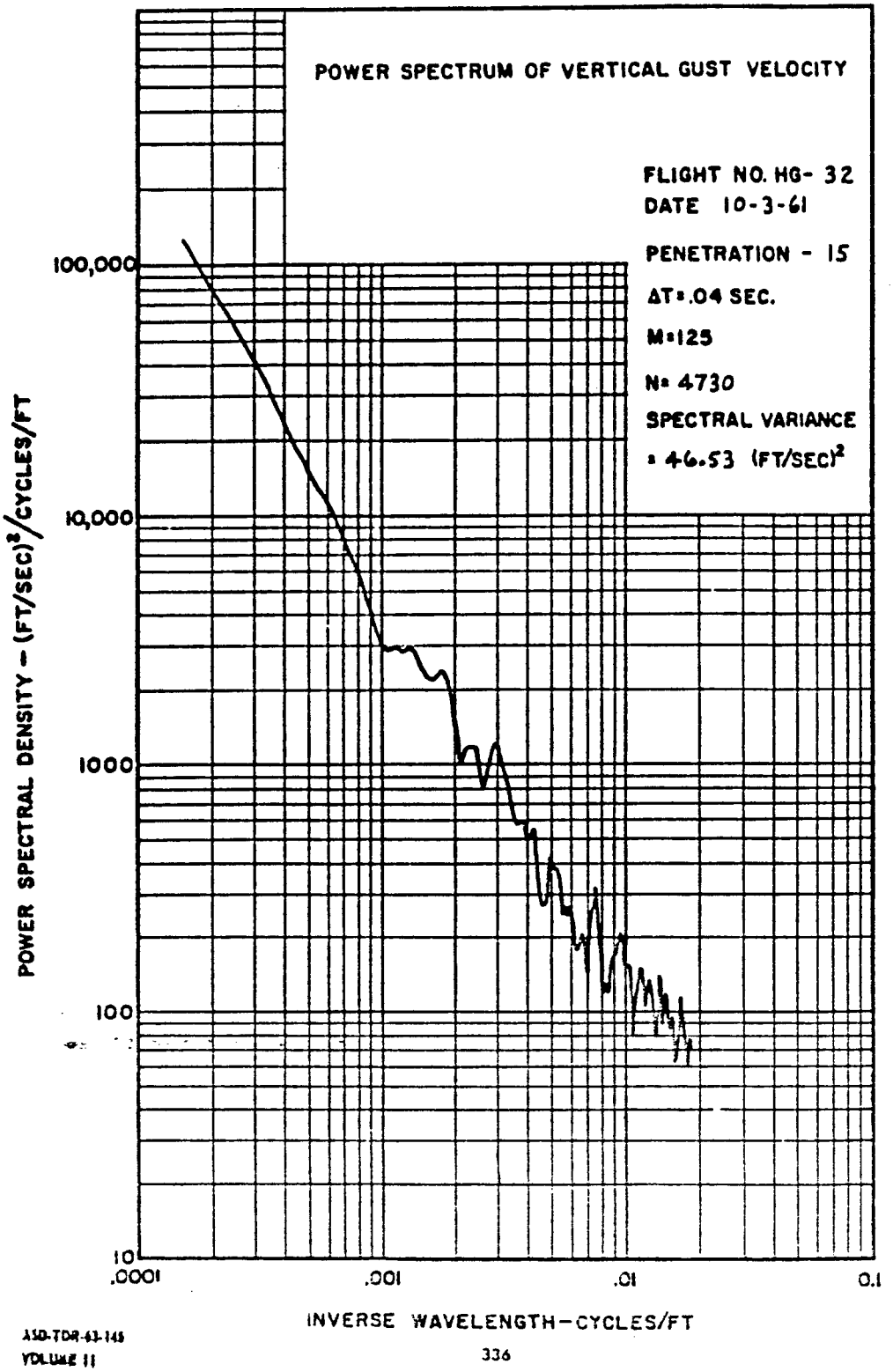

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 3980
SPECTRAL VARIANCE
= 30.64 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

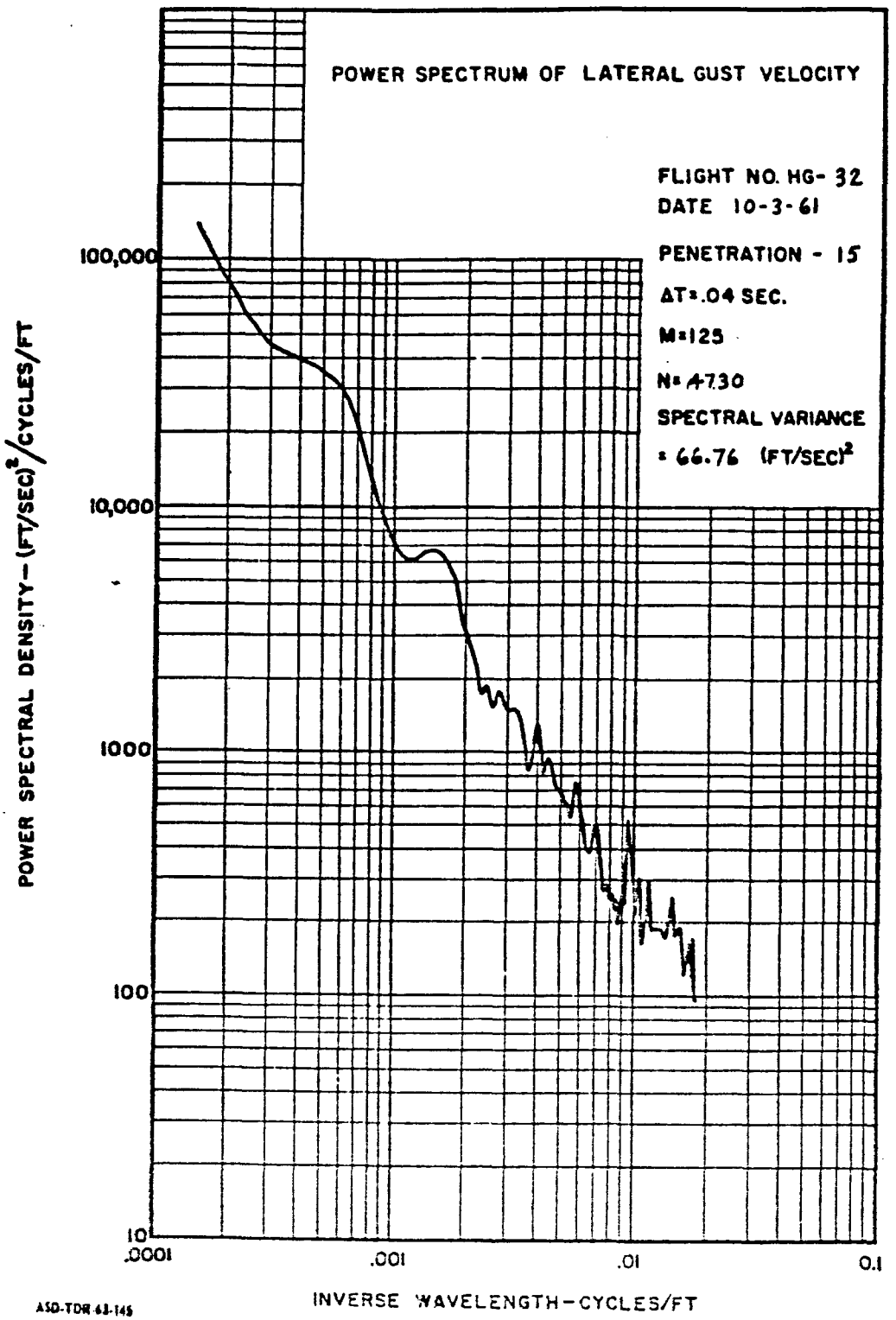

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 3980
SPECTRAL VARIANCE
= 61.27 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

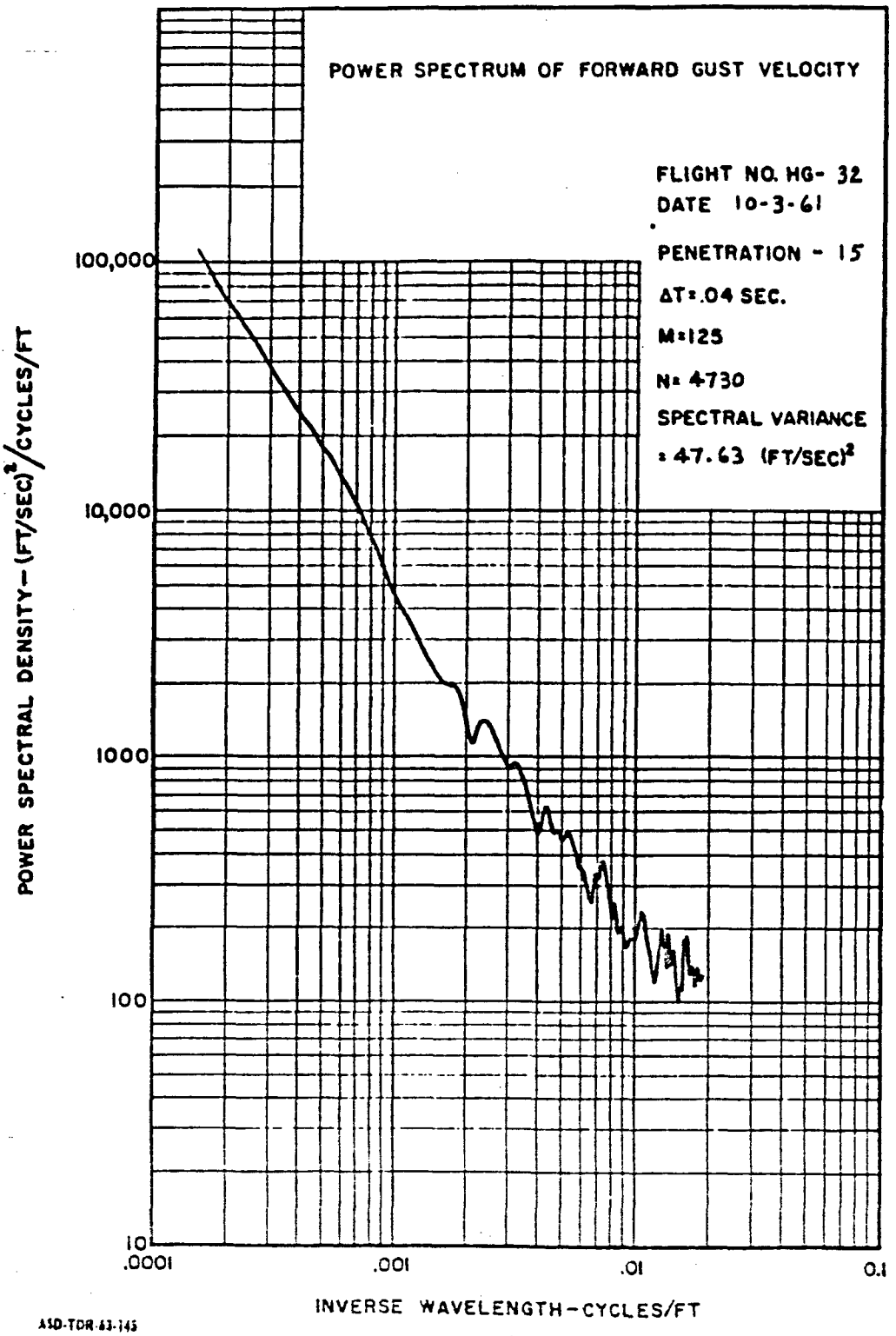

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 3980
SPECTRAL VARIANCE
= 37.85 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

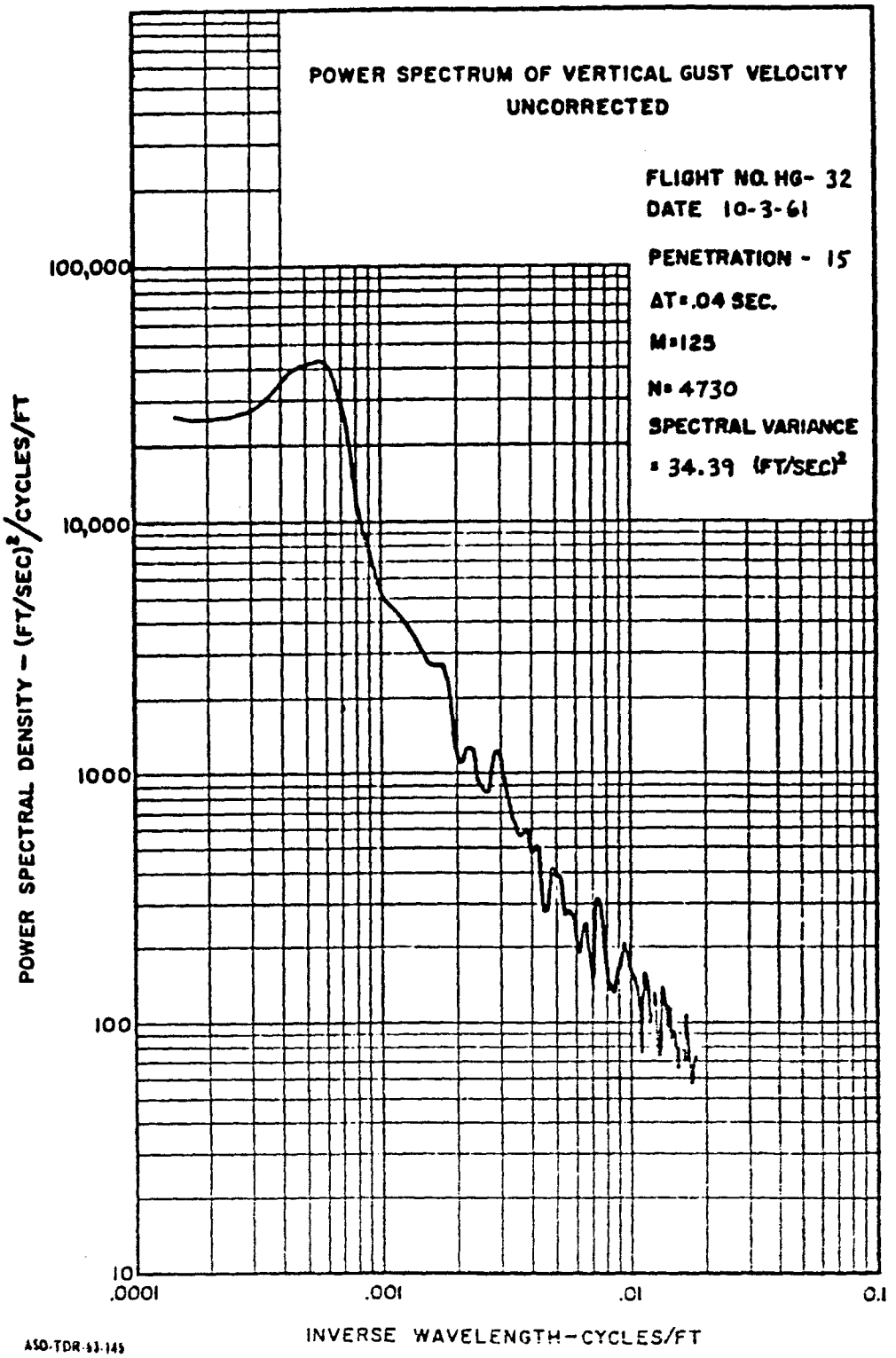

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 3980
SPECTRAL VARIANCE
= 30.45 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

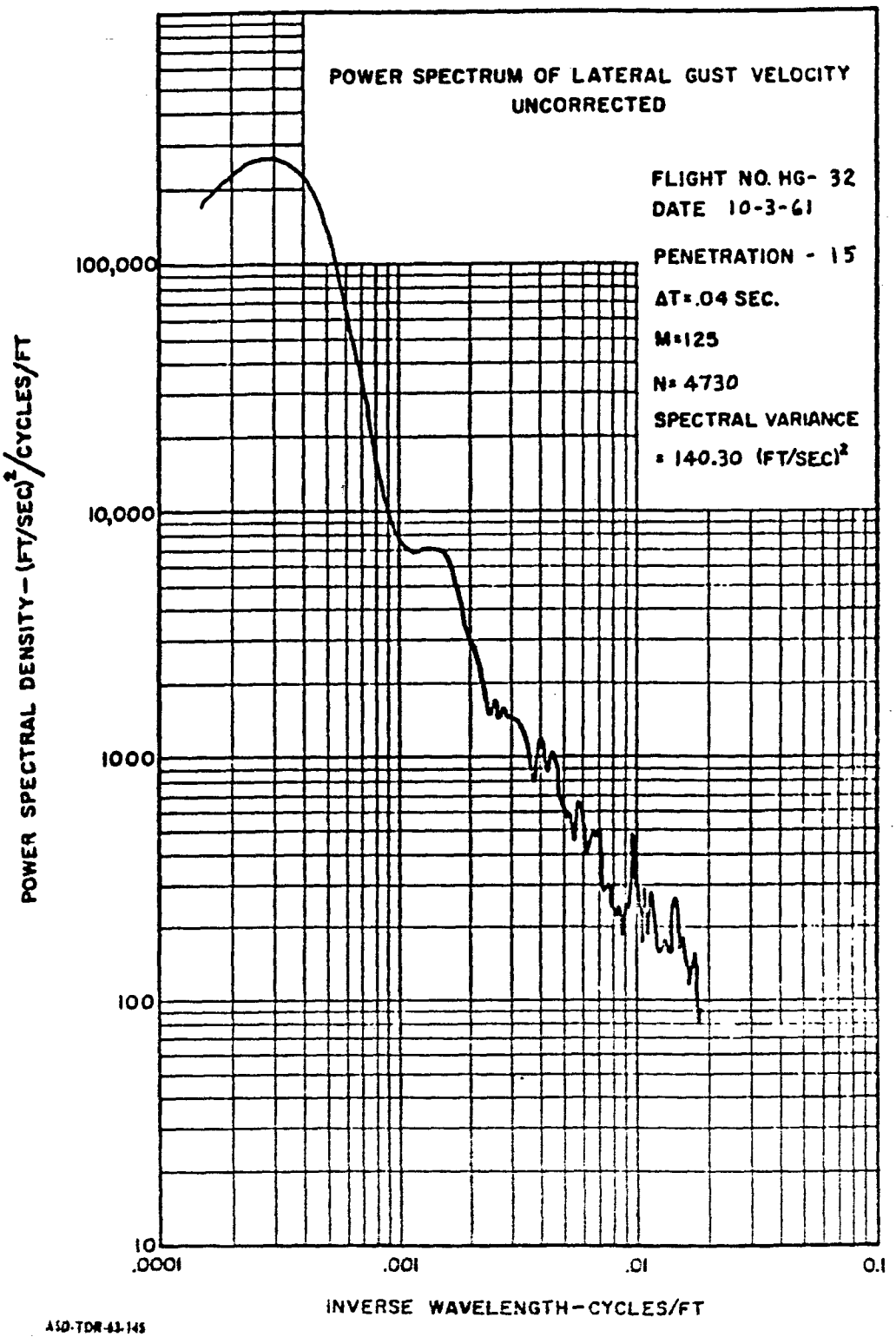

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 14
ΔT=.04 SEC.
M=125
N= 3980
SPECTRAL VARIANCE
= 195.46 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

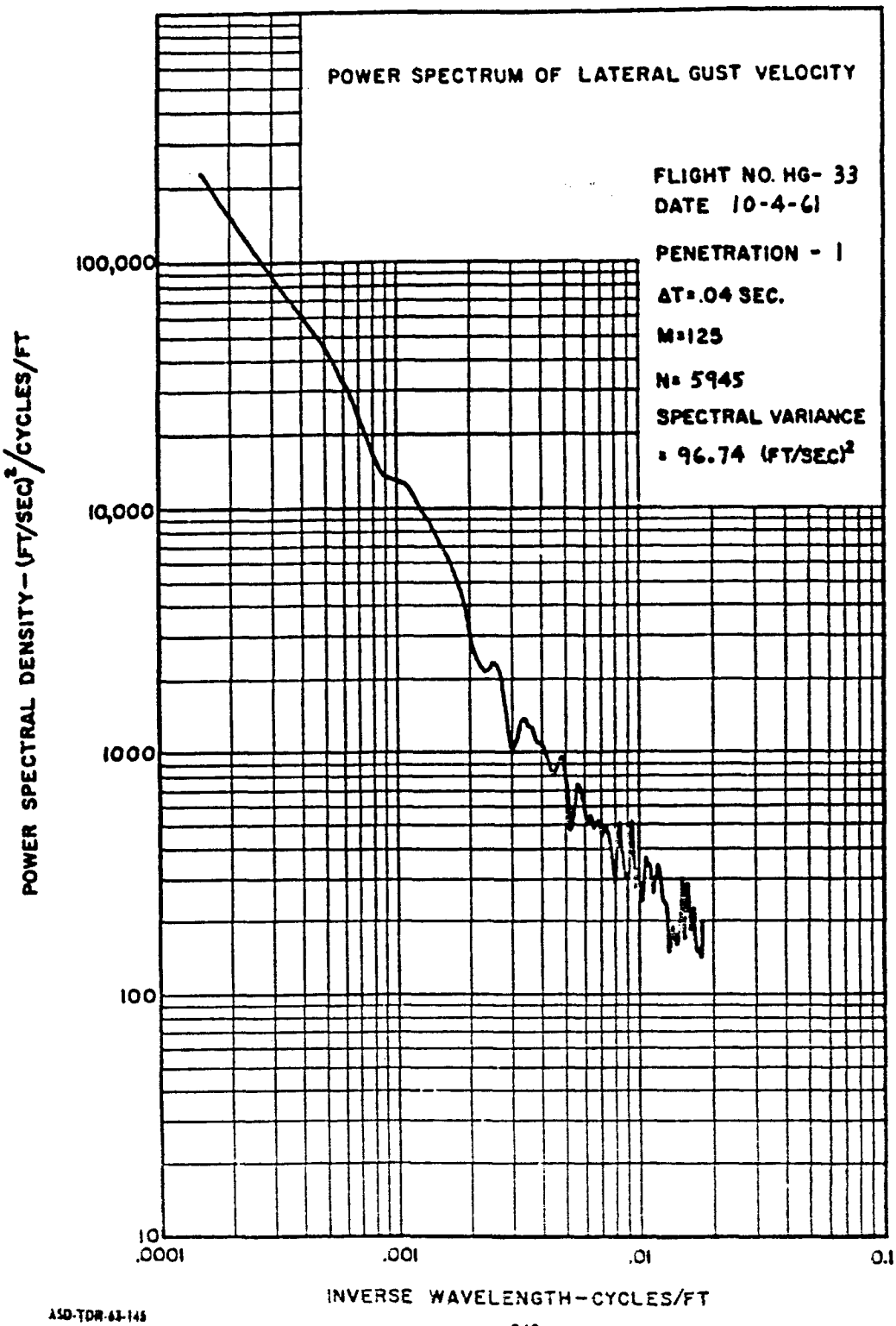

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 4730
SPECTRAL VARIANCE
= 46.53 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

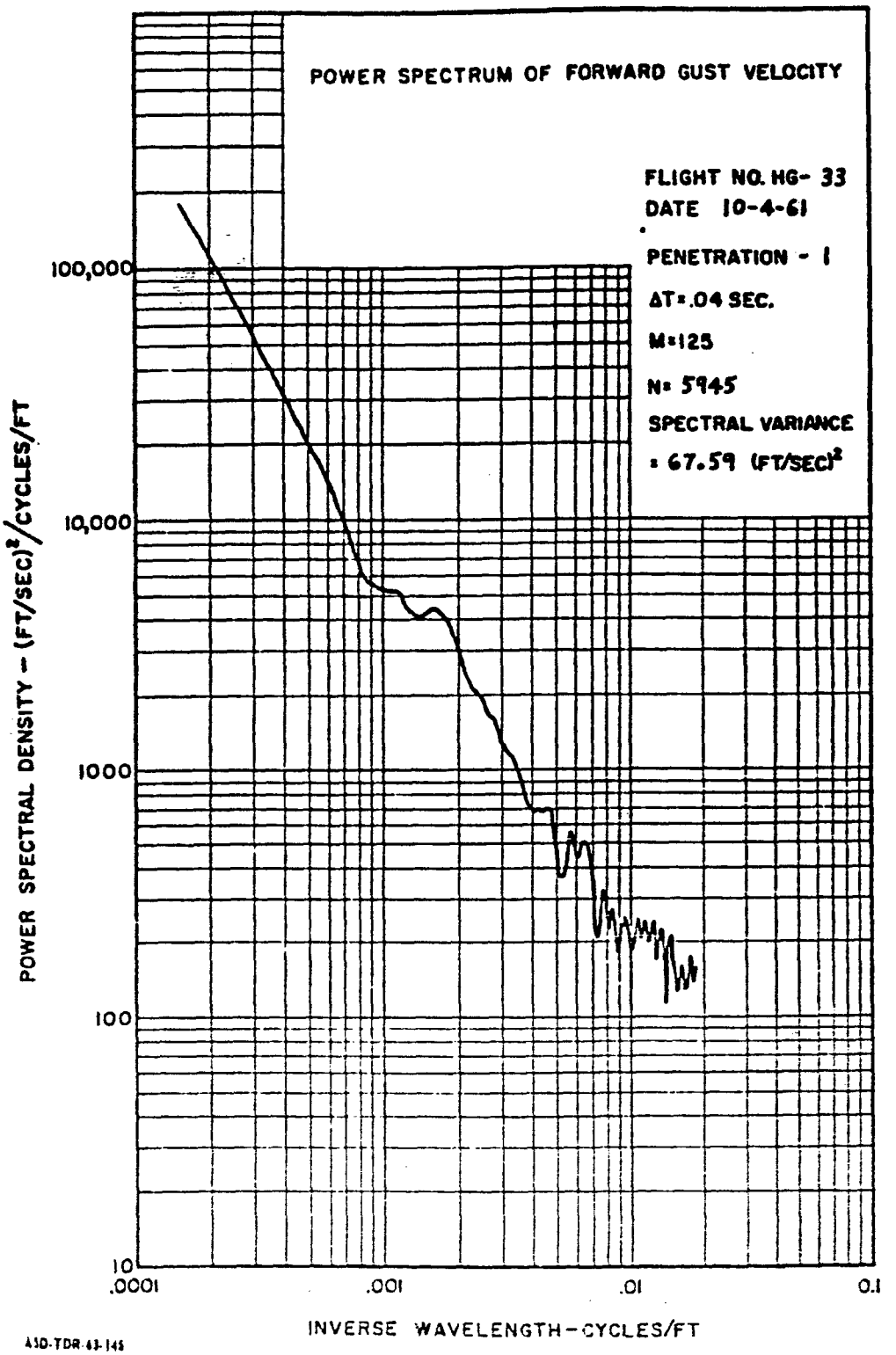

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N=4730
SPECTRAL VARIANCE
= 66.76 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

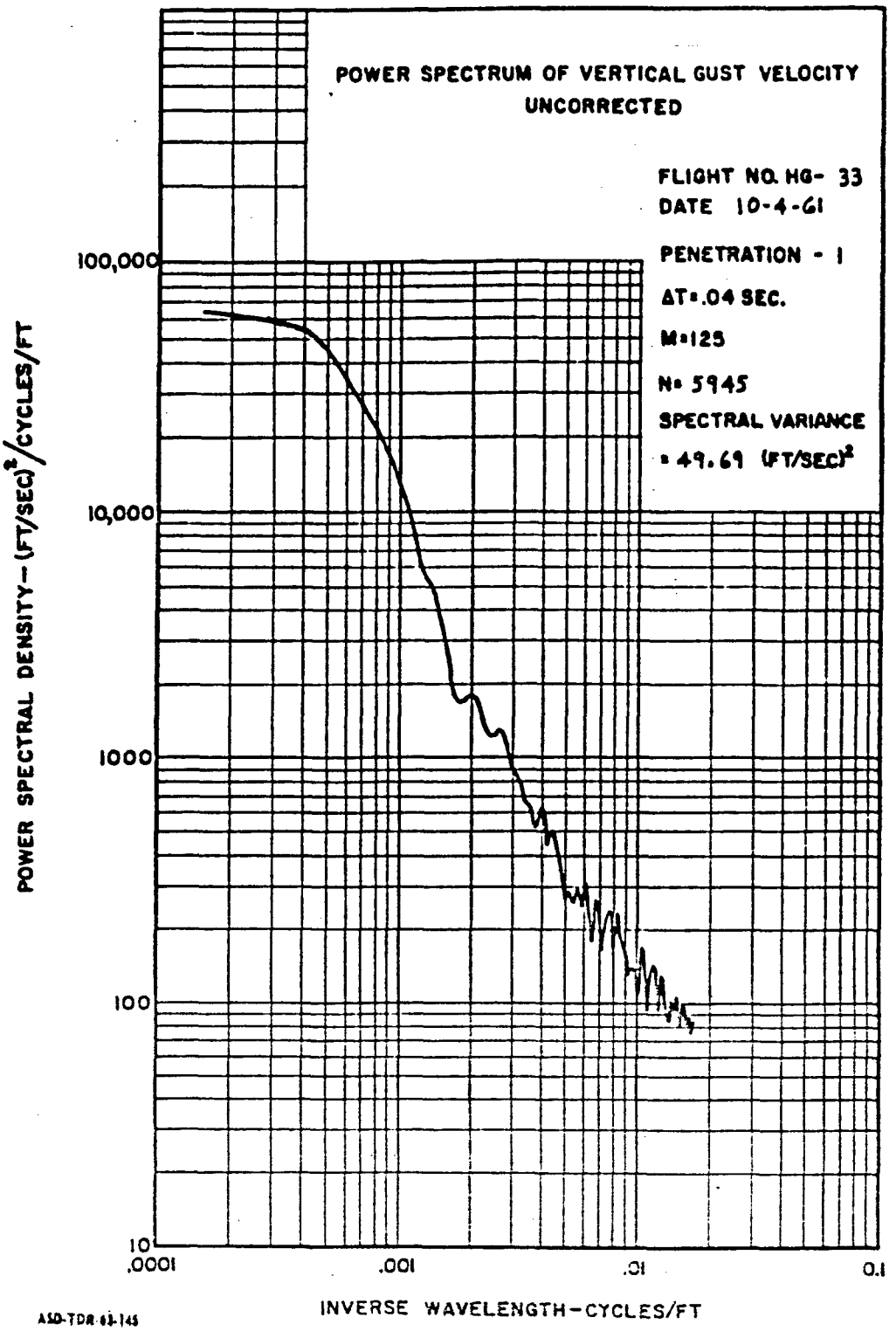

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 4730
SPECTRAL VARIANCE
= 47.63 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

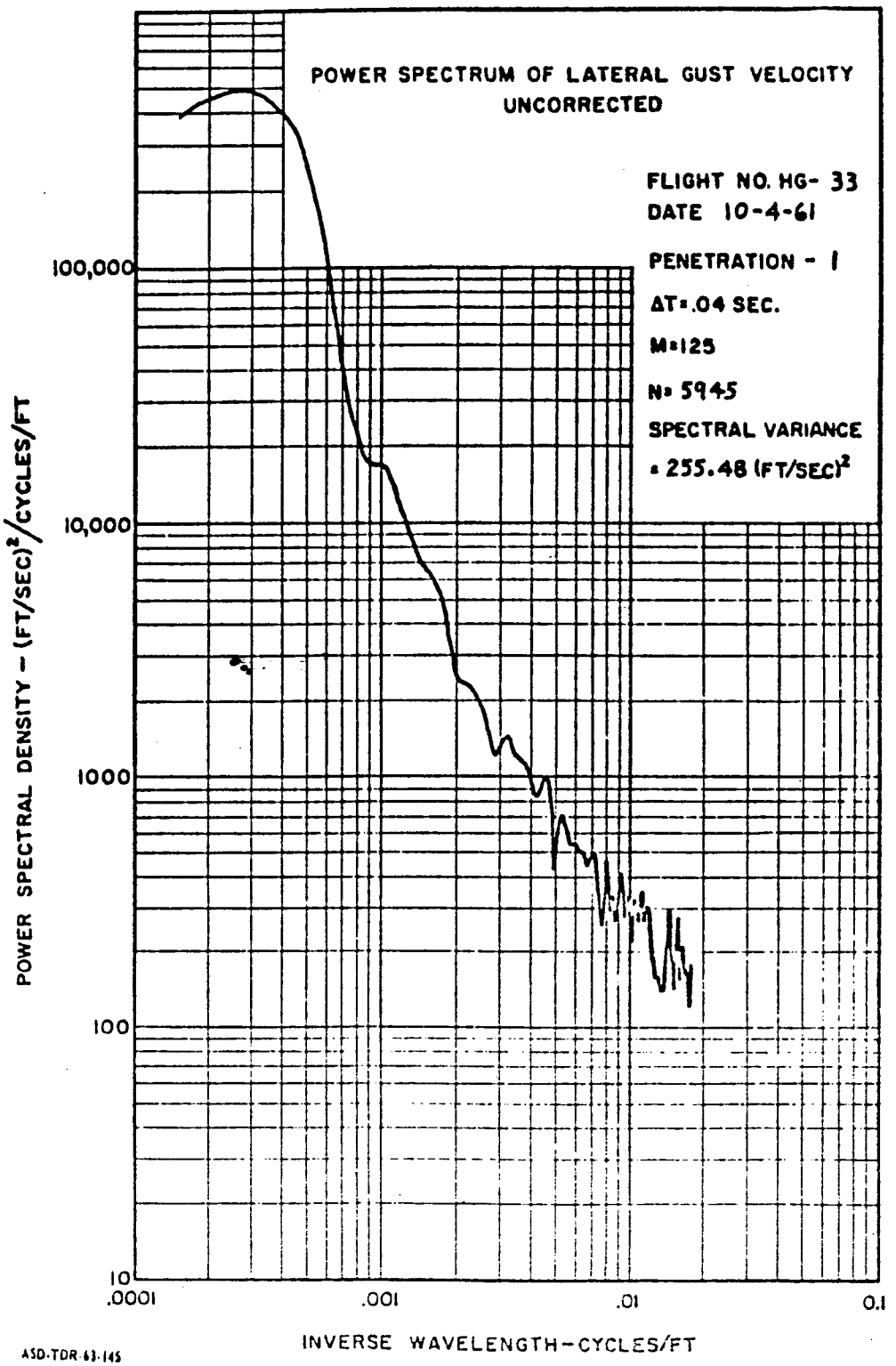

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N=4730
SPECTRAL VARIANCE
= 34.39 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

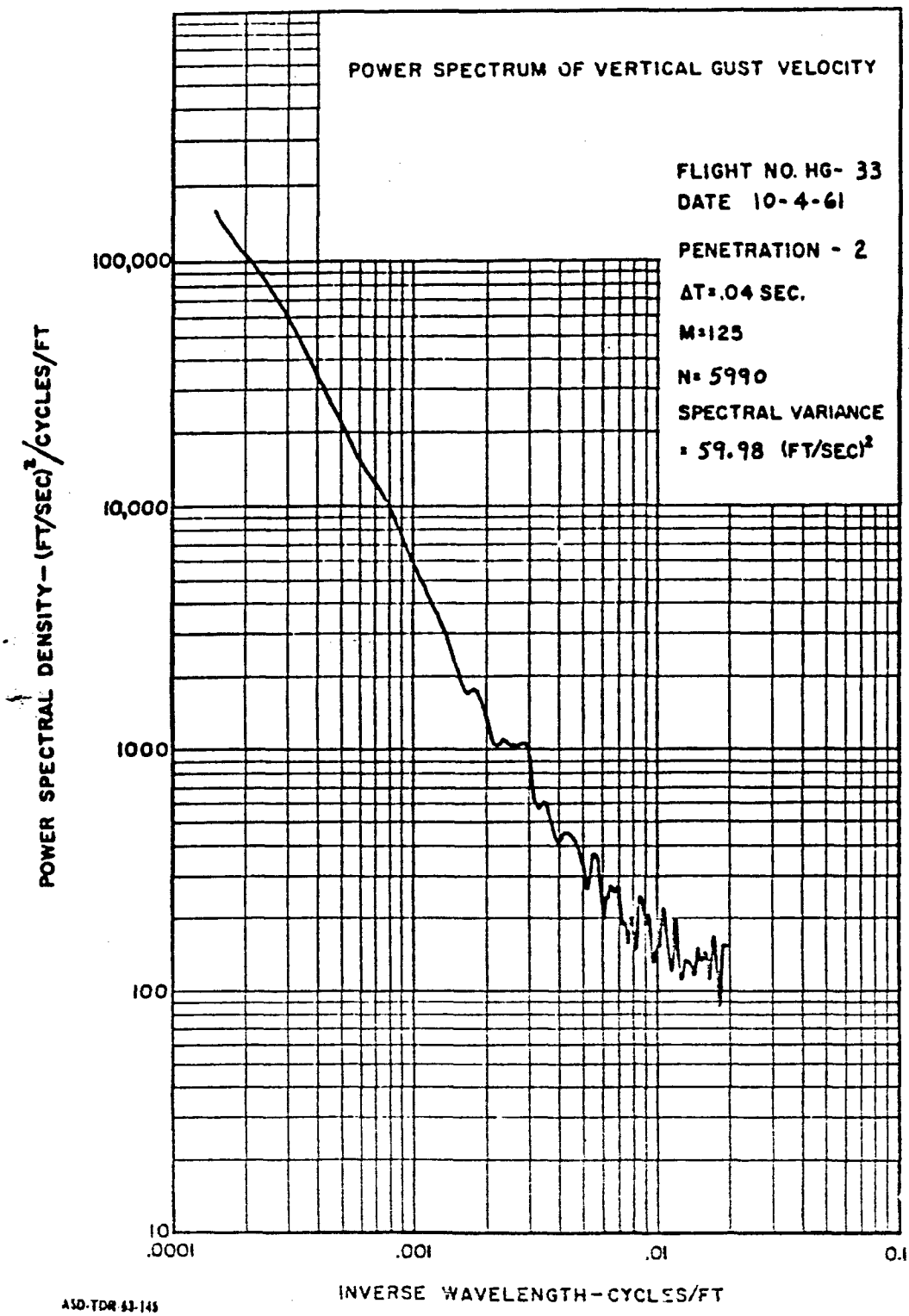

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 32
DATE 10-3-61
PENETRATION - 15
ΔT=.04 SEC.
M=125
N= 4730
SPECTRAL VARIANCE
= 140.30 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

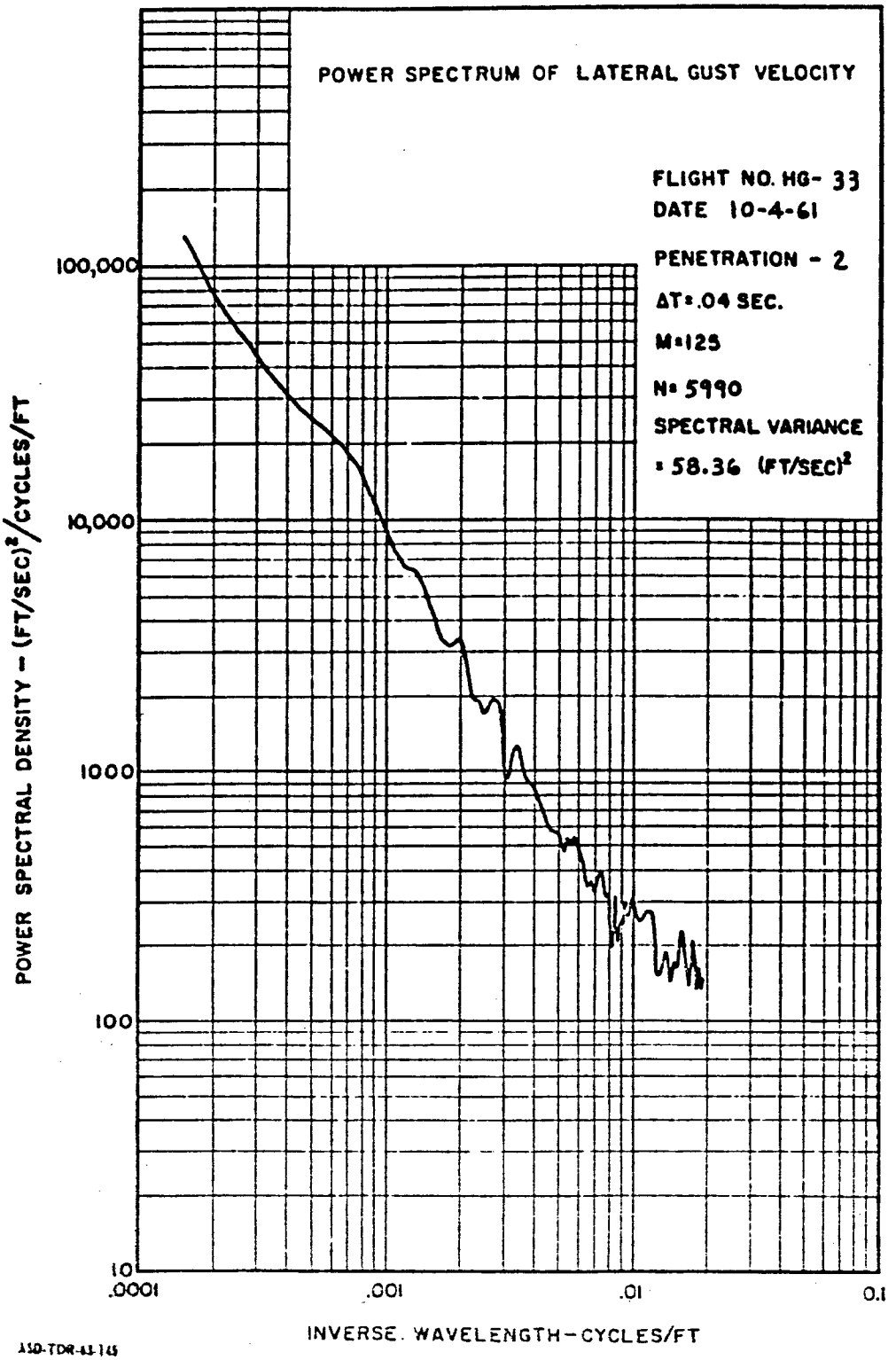

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 5945
SPECTRAL VARIANCE
= 96.74 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

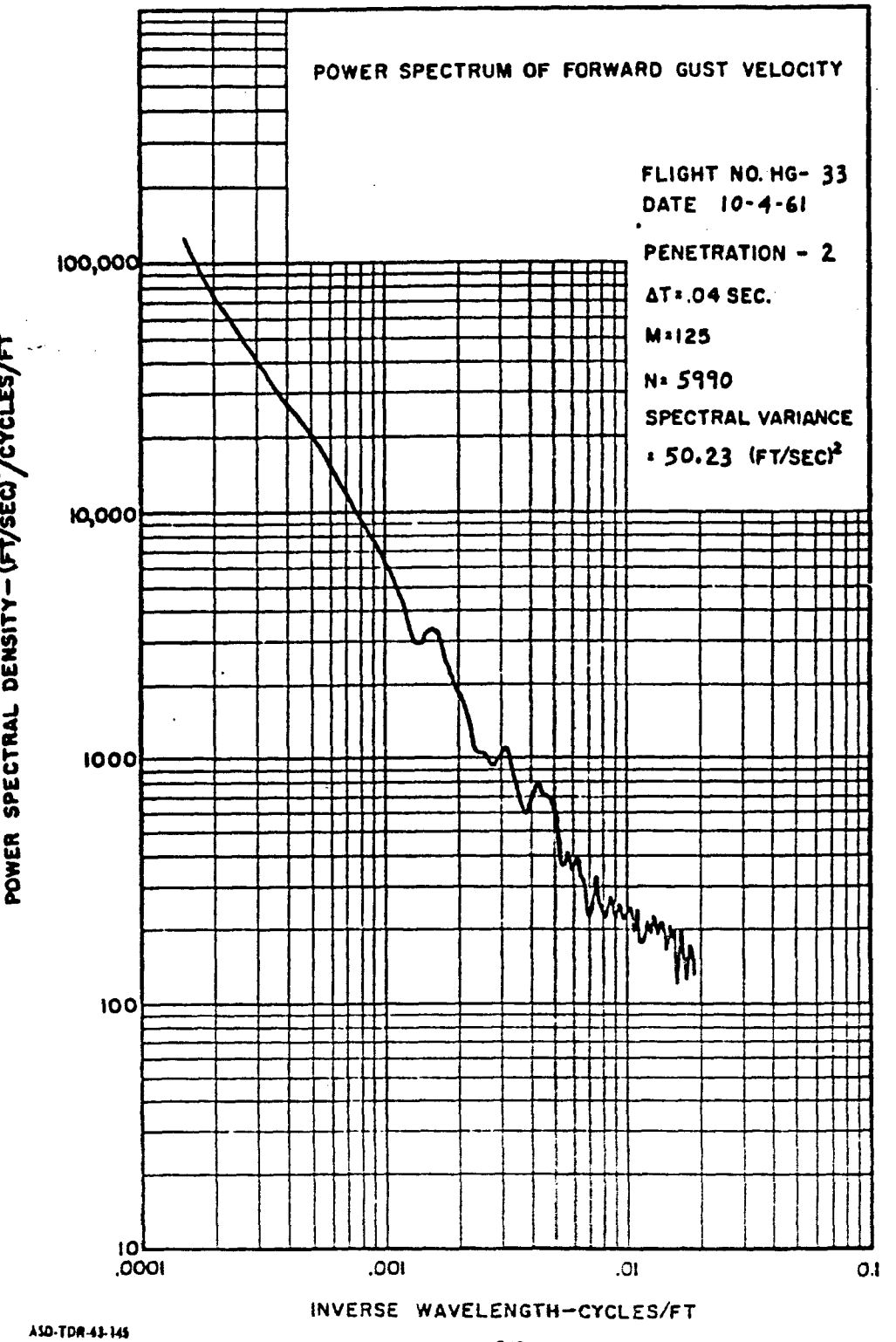

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 5945
SPECTRAL VARIANCE
= 67.59 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

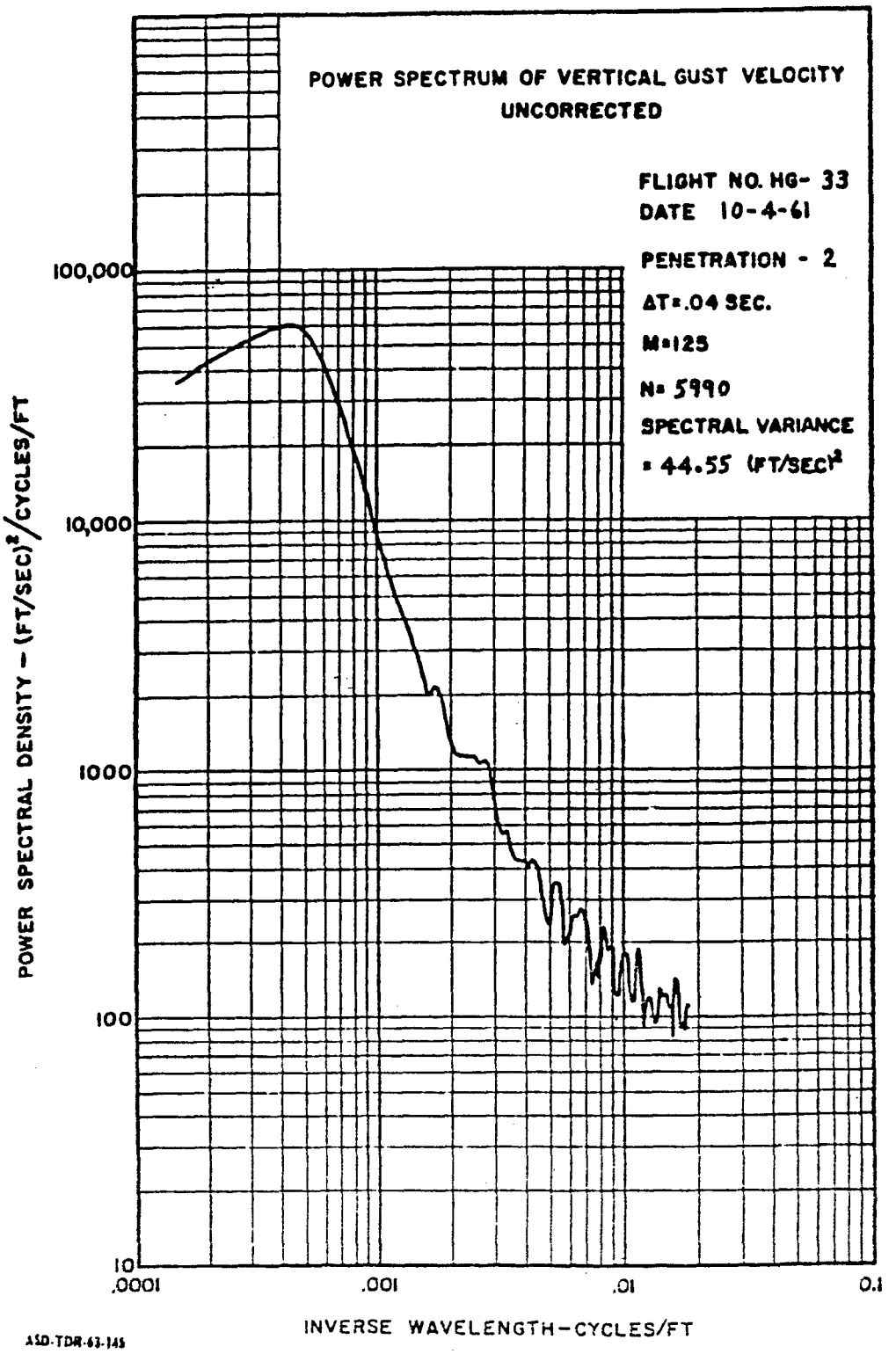

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 5945
SPECTRAL VARIANCE
= 49.69 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

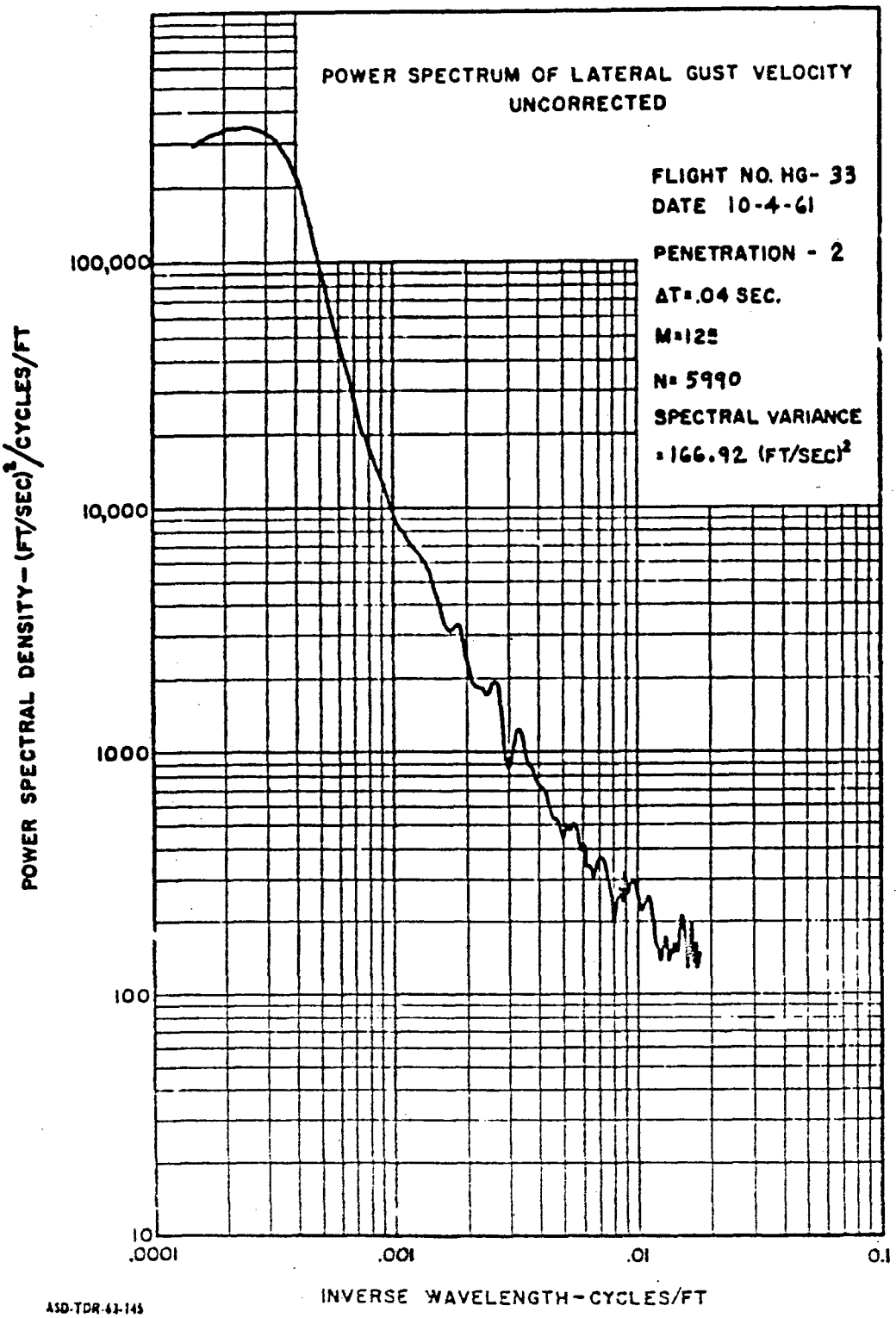

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 5945
SPECTRAL VARIANCE
= 255.48 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

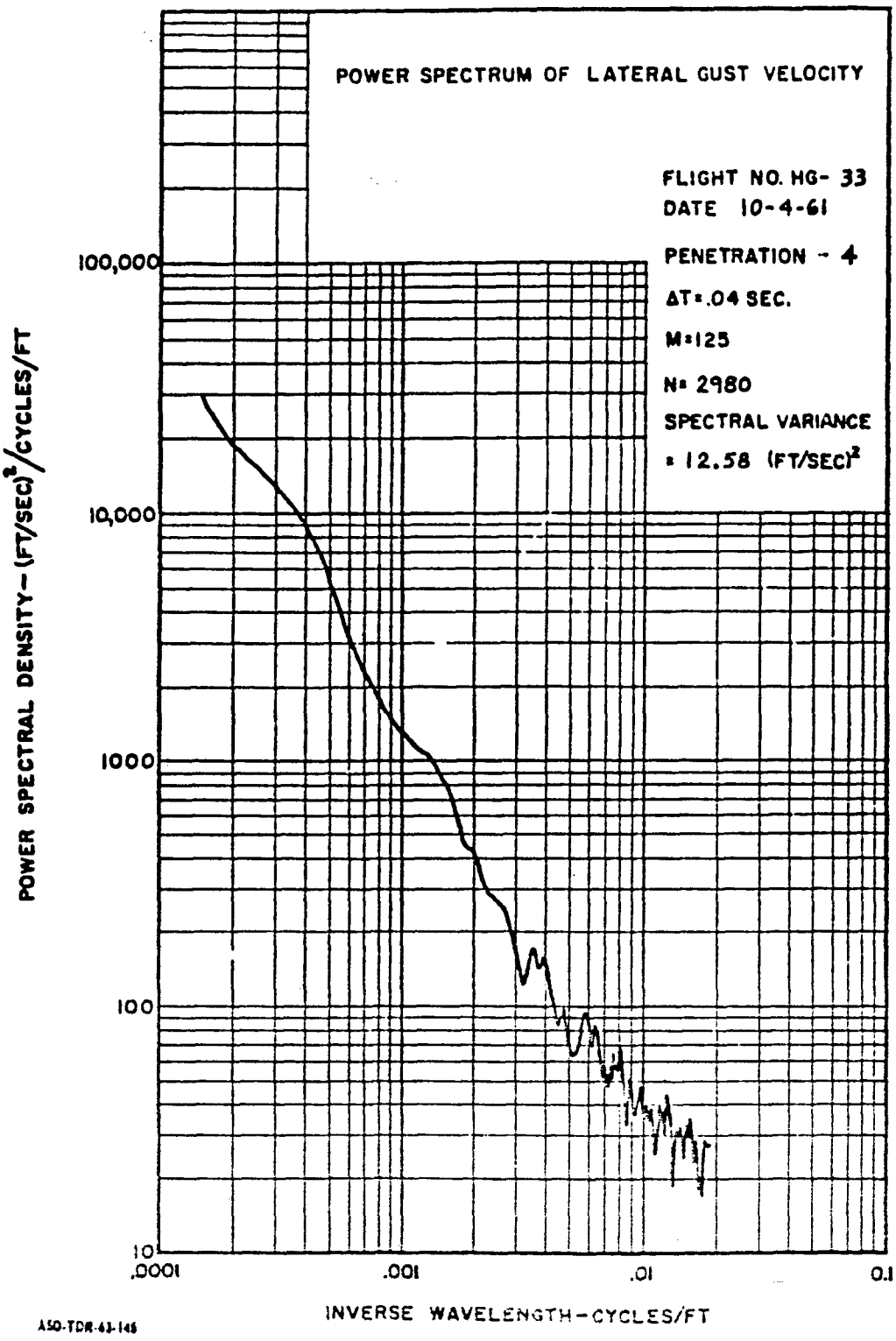

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 59.98 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

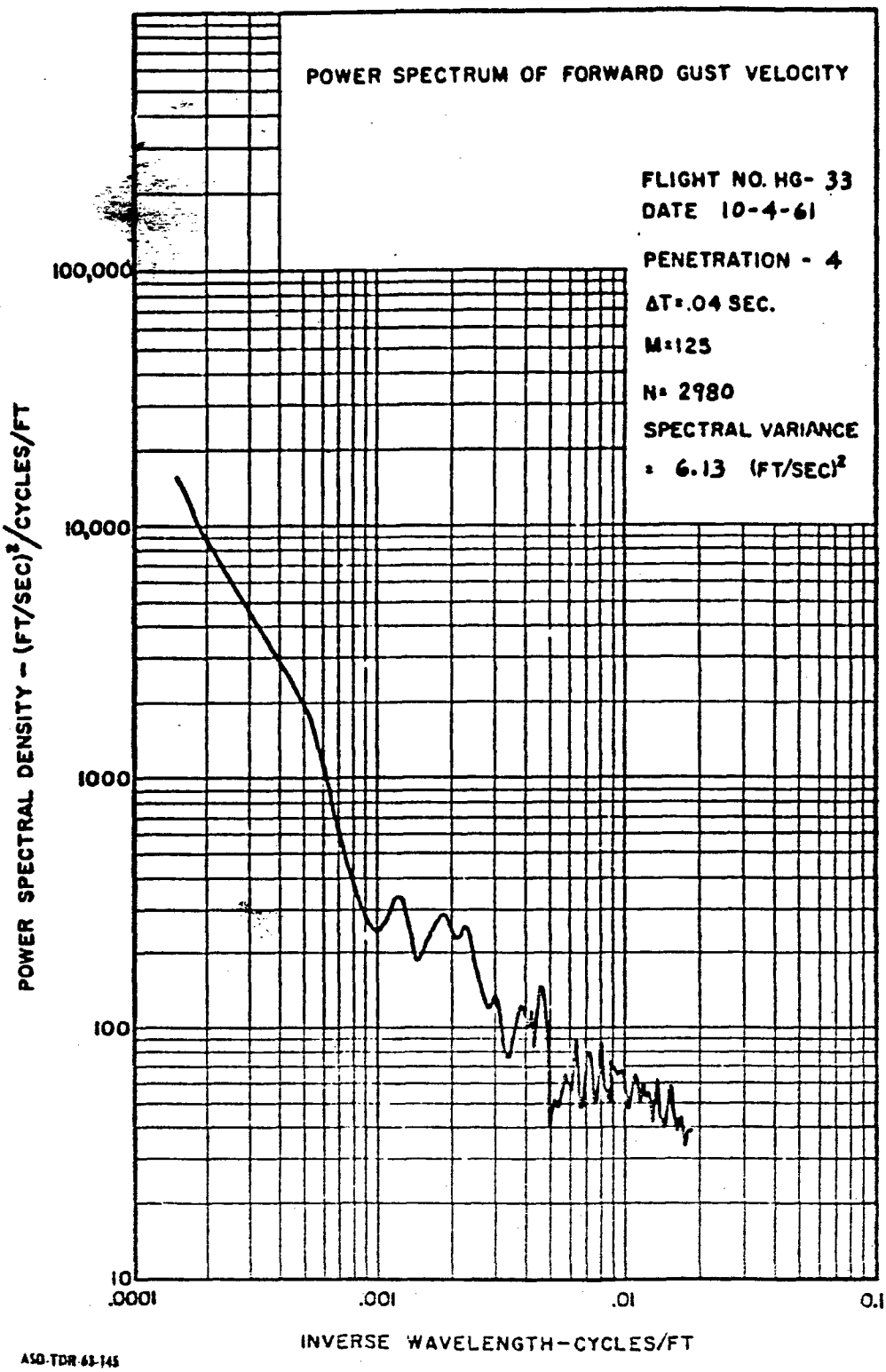

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 58.36 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

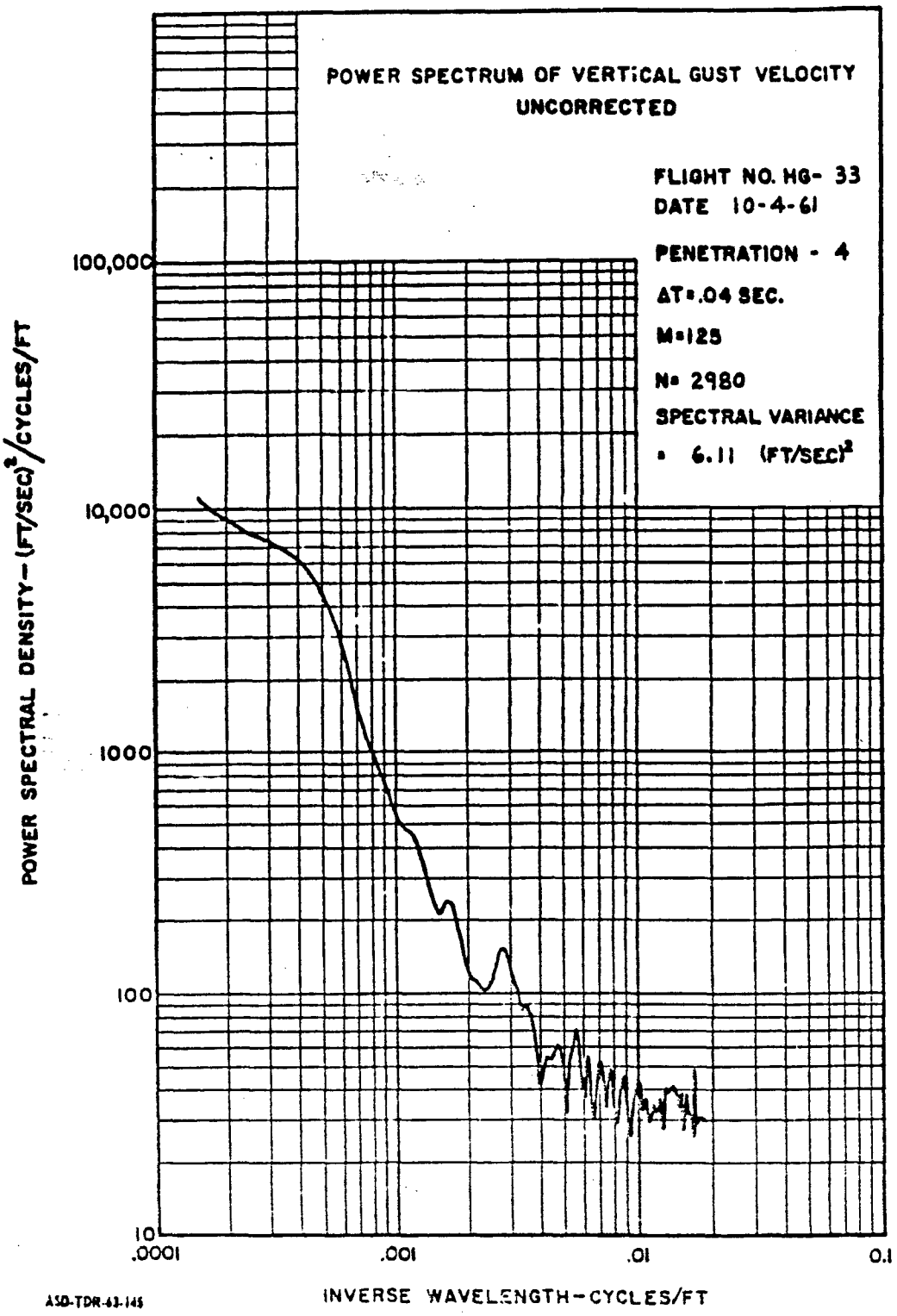

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 50.23 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

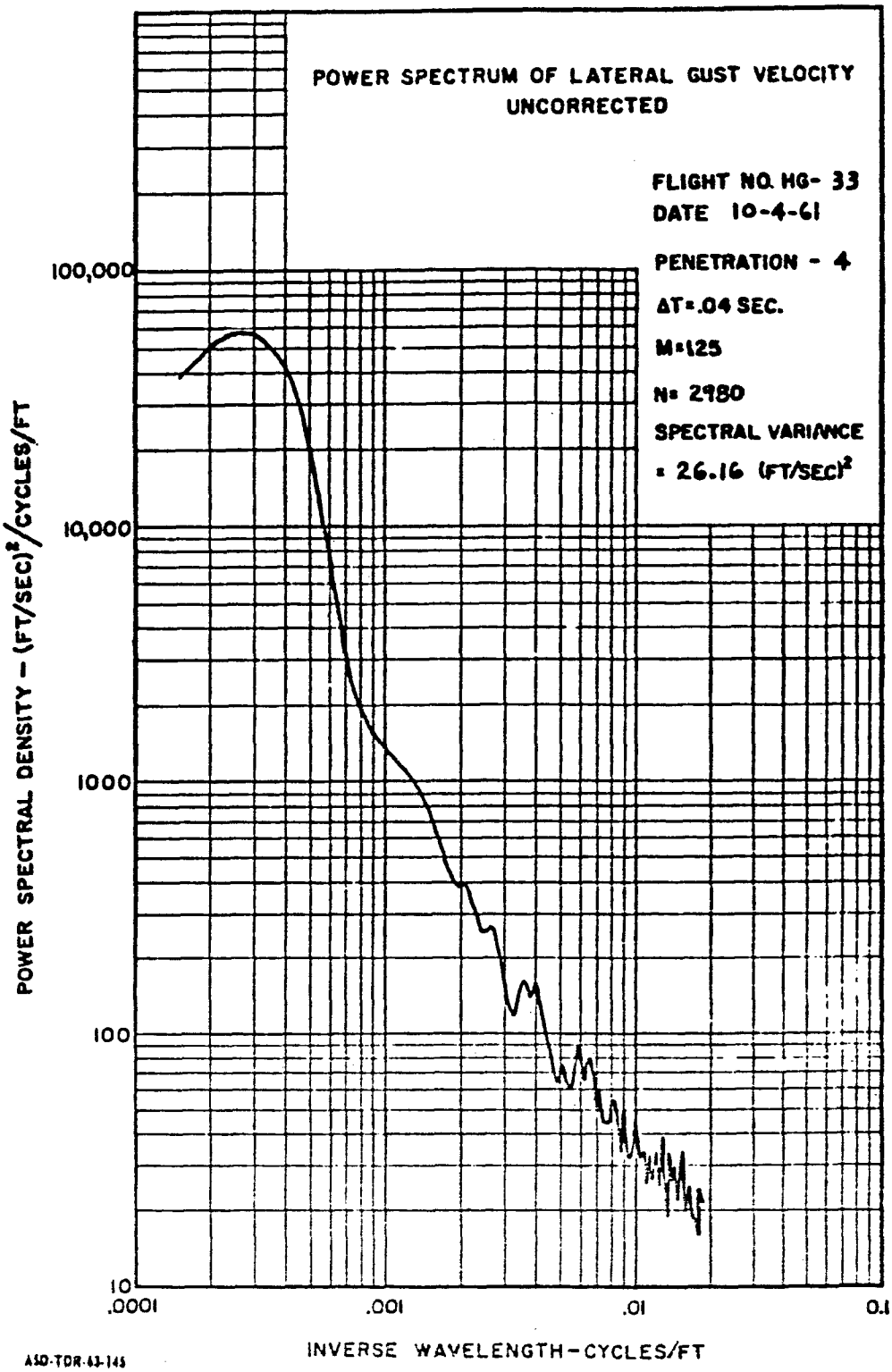

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 44.55 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

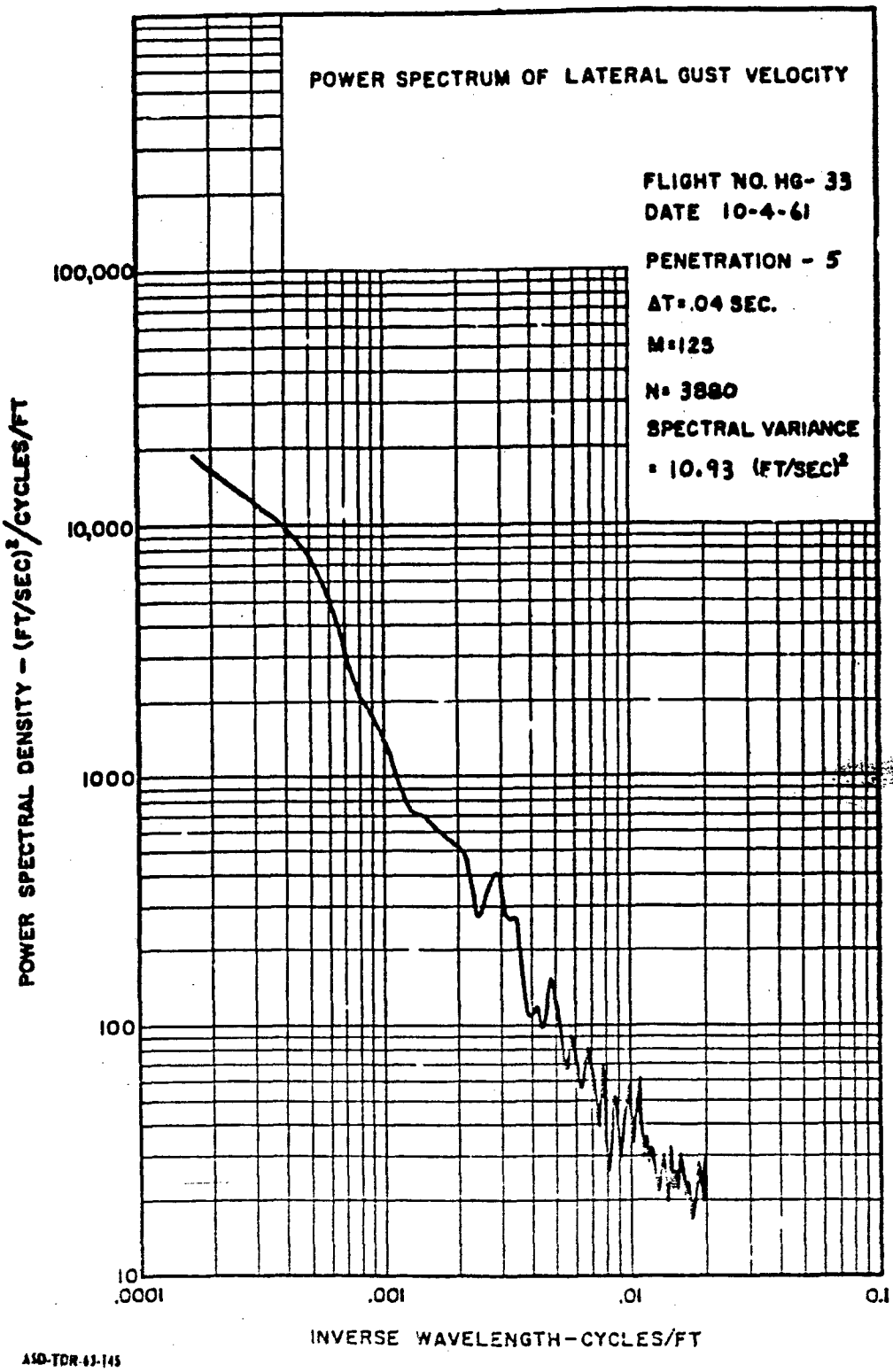

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 2
ΔT=.04 SEC.
M=128
N= 5990
SPECTRAL VARIANCE
=166.92 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

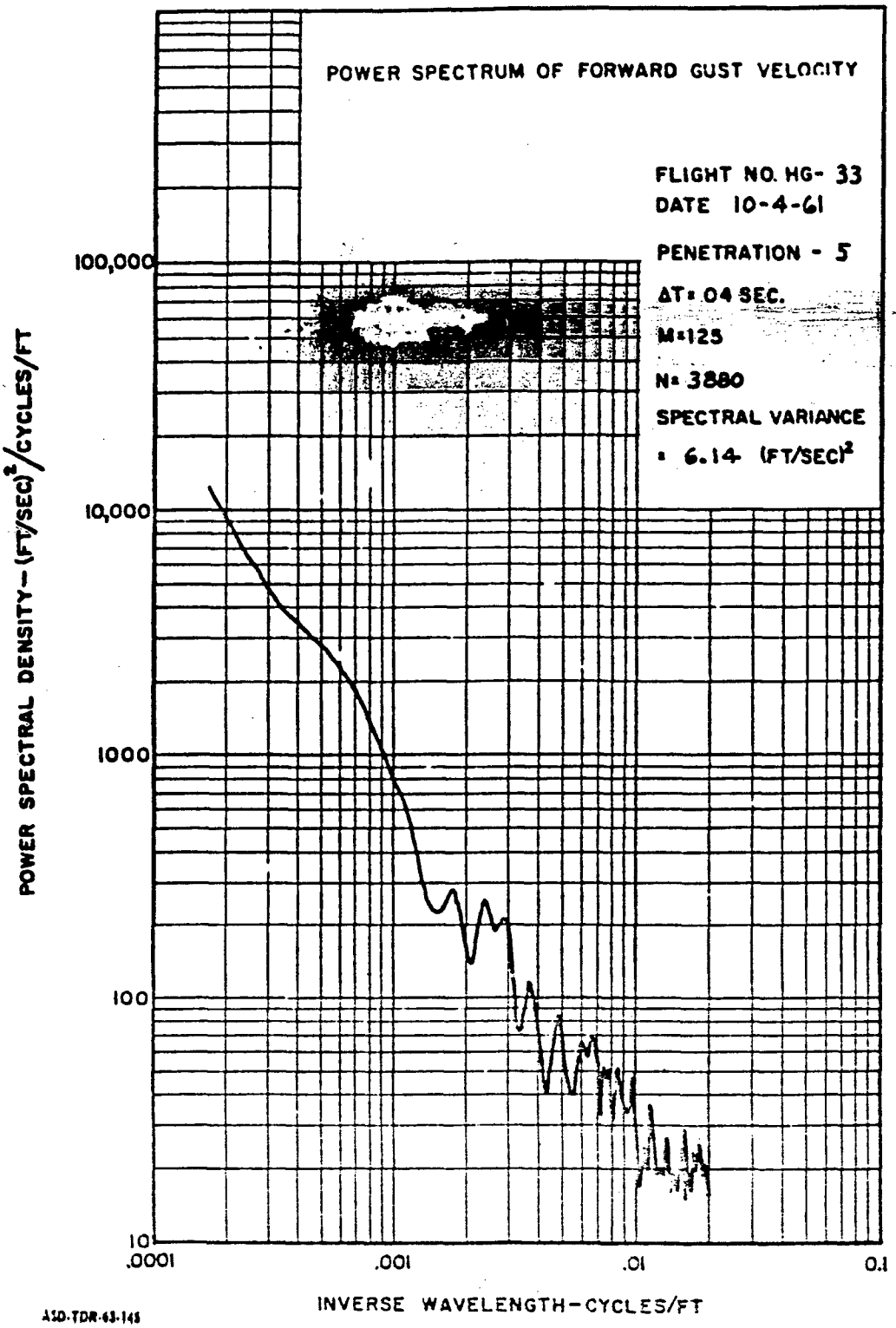

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2980
SPECTRAL VARIANCE
= 12.58 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

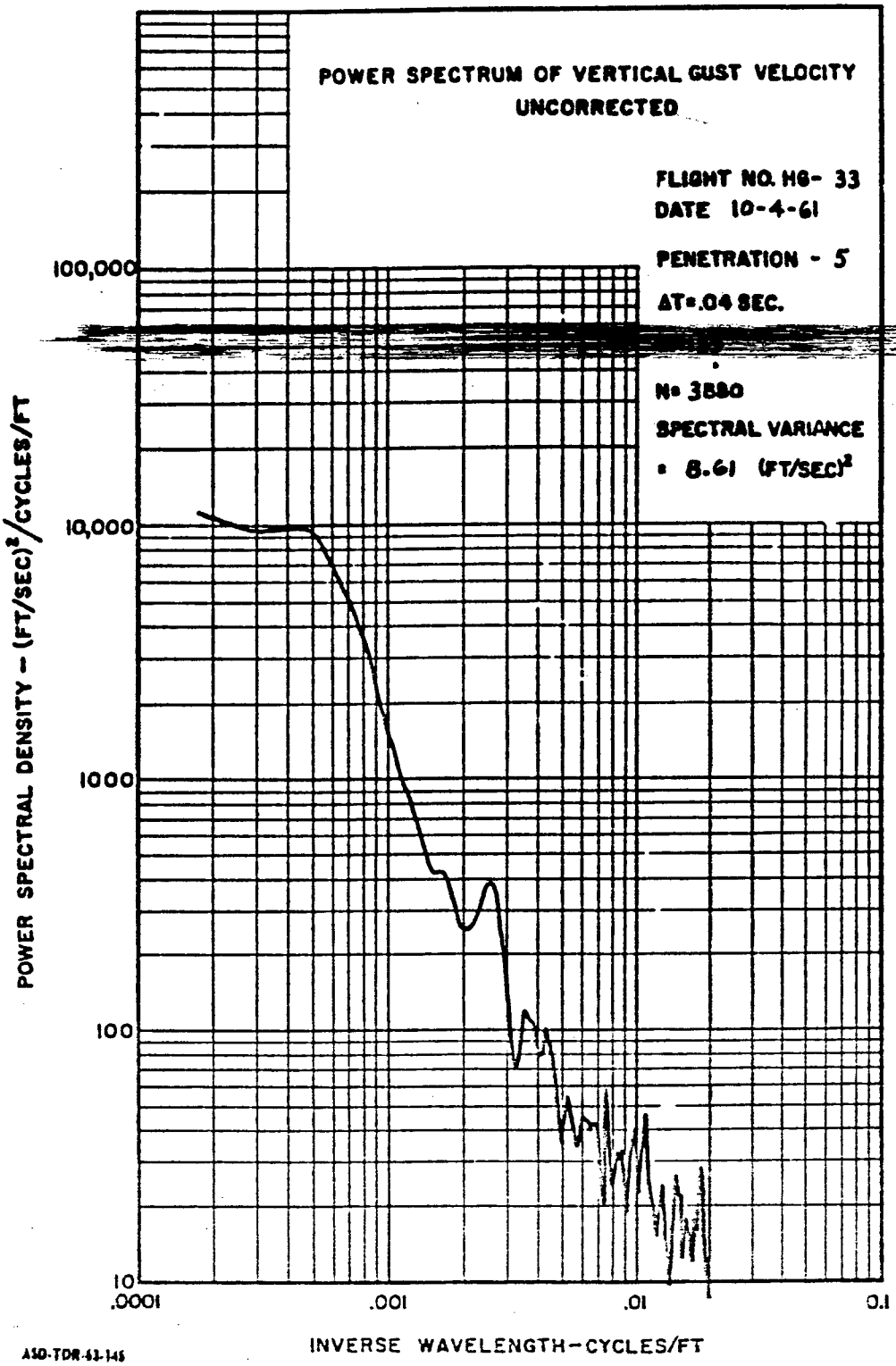

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2980
SPECTRAL VARIANCE
= 6.13 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

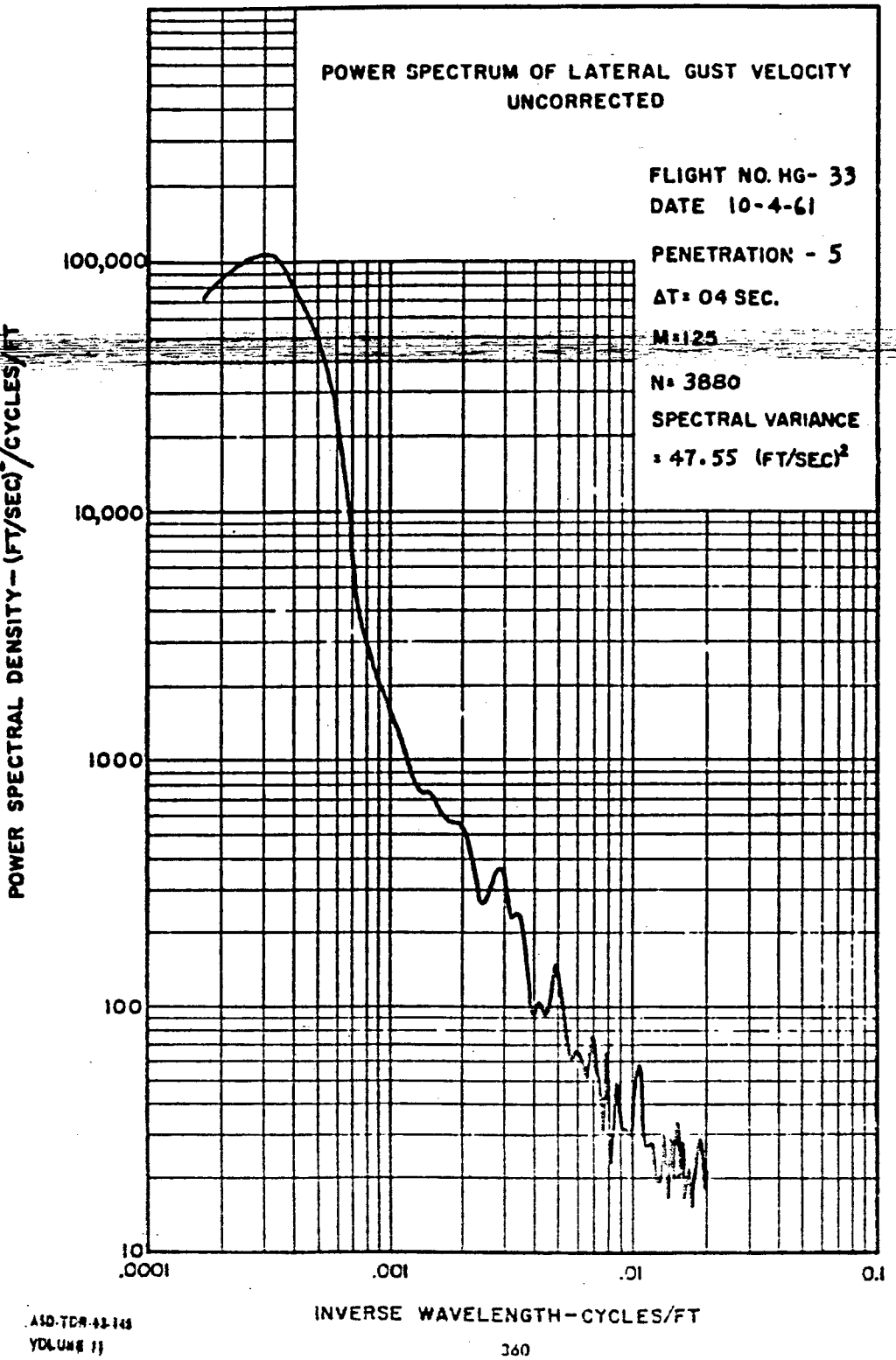

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2980
SPECTRAL VARIANCE
= 6.11 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

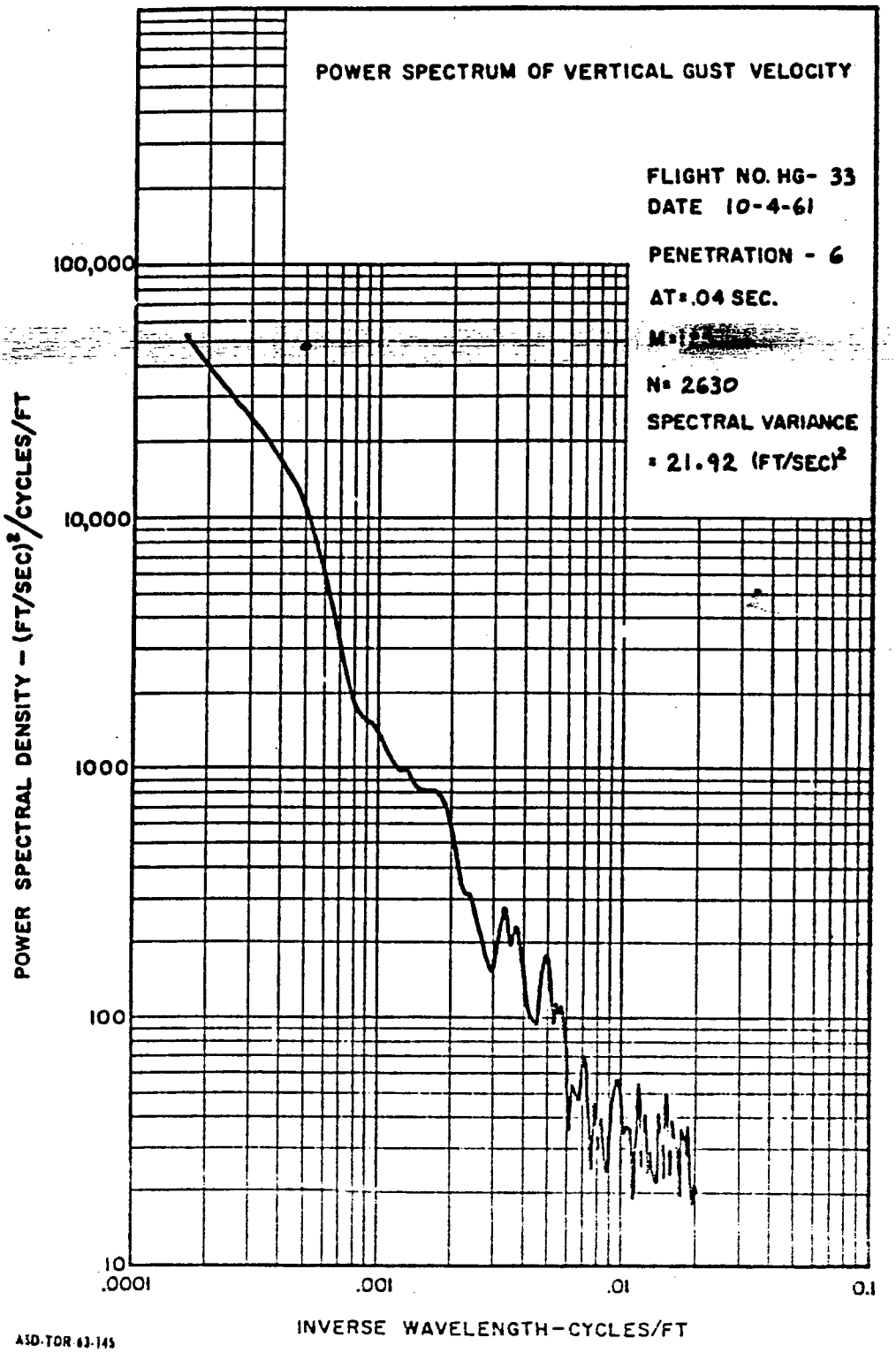

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 2980
SPECTRAL VARIANCE
= 26.16 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

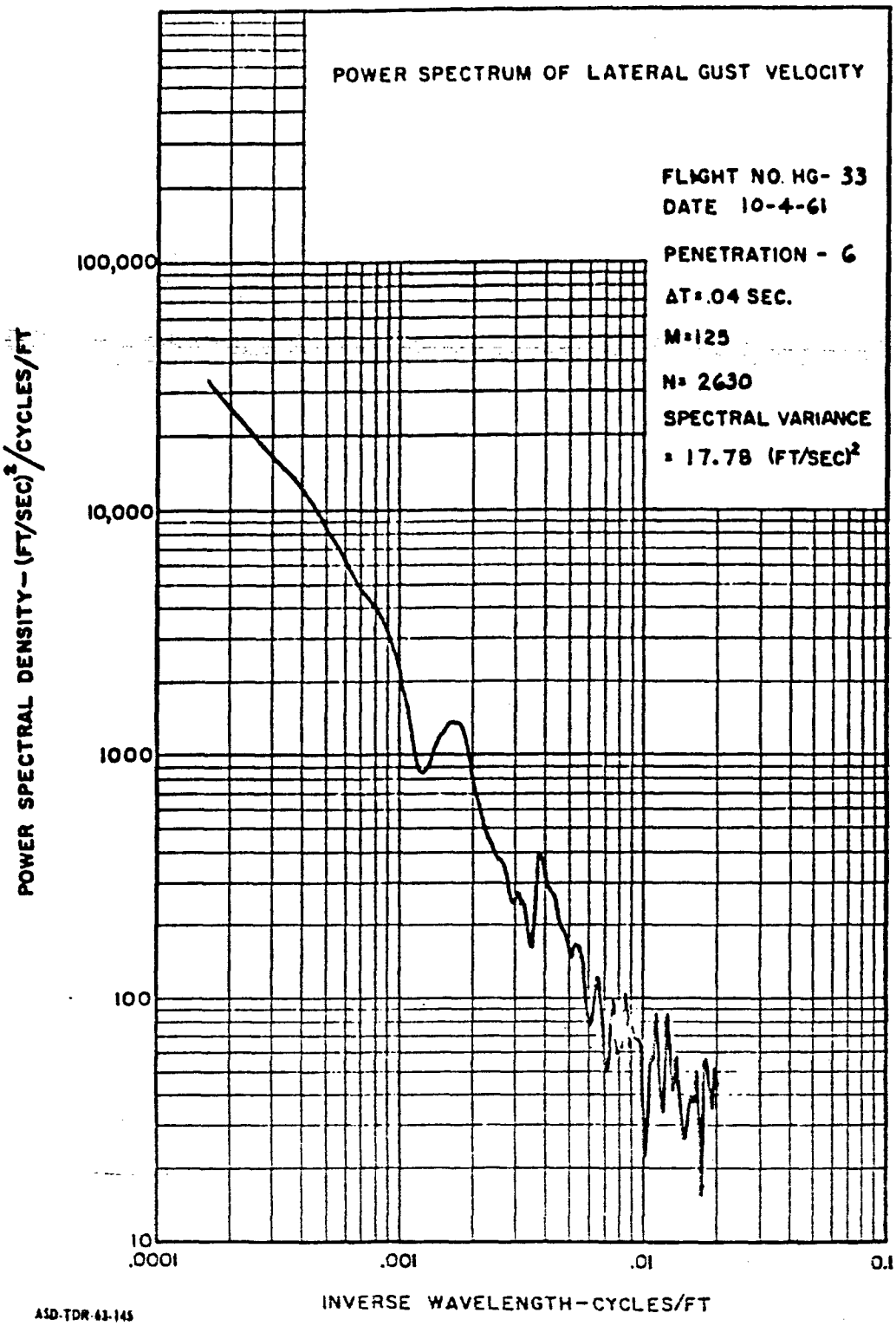

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 5
ΔT=.04 SEC.
M=125
N= 3880
SPECTRAL VARIANCE
= 10.93 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

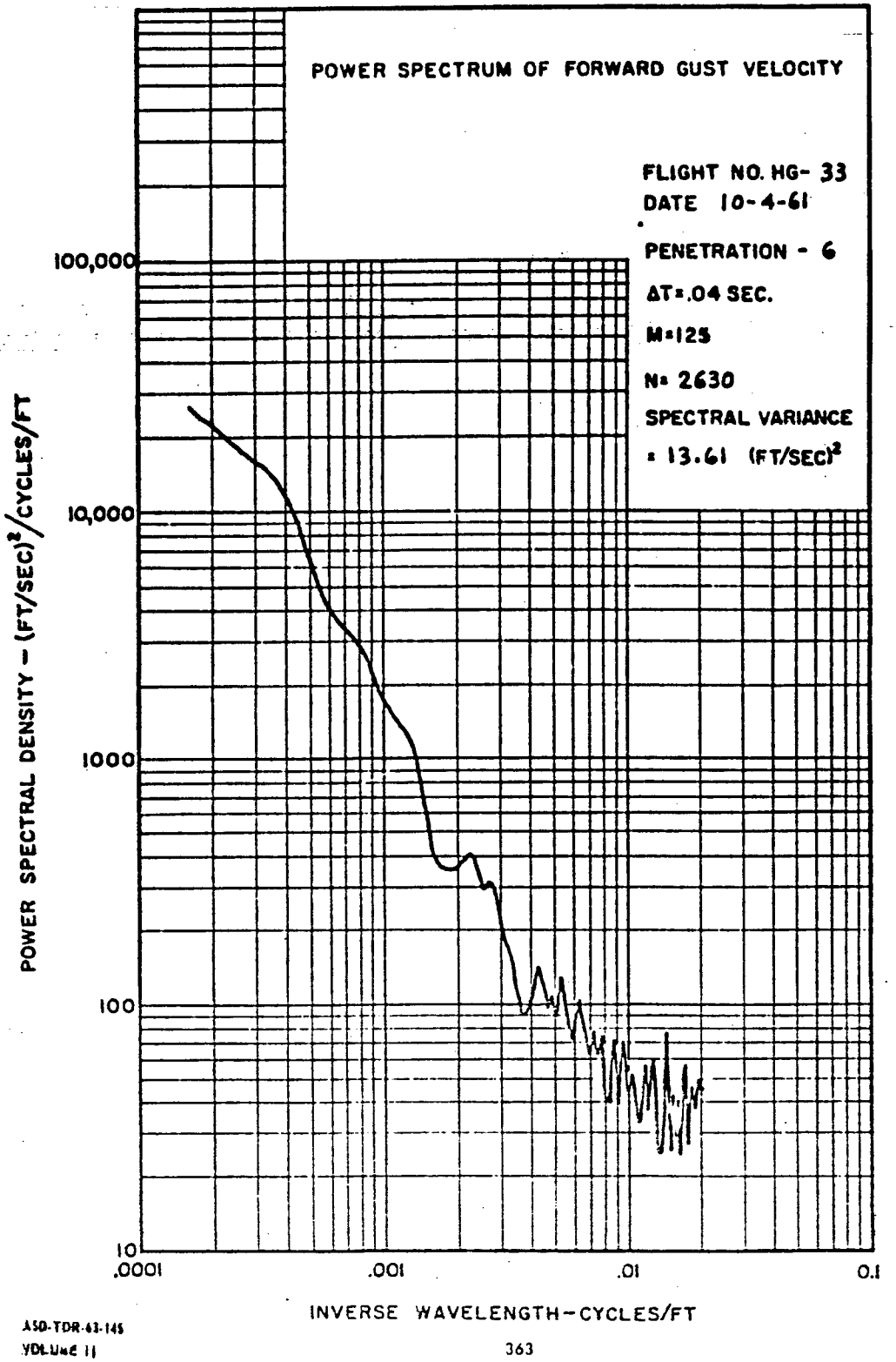

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 5
ΔT= 04 SEC.
M=125
N= 3880
SPECTRAL VARIANCE
= 6.14 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH – CYCLES/FT

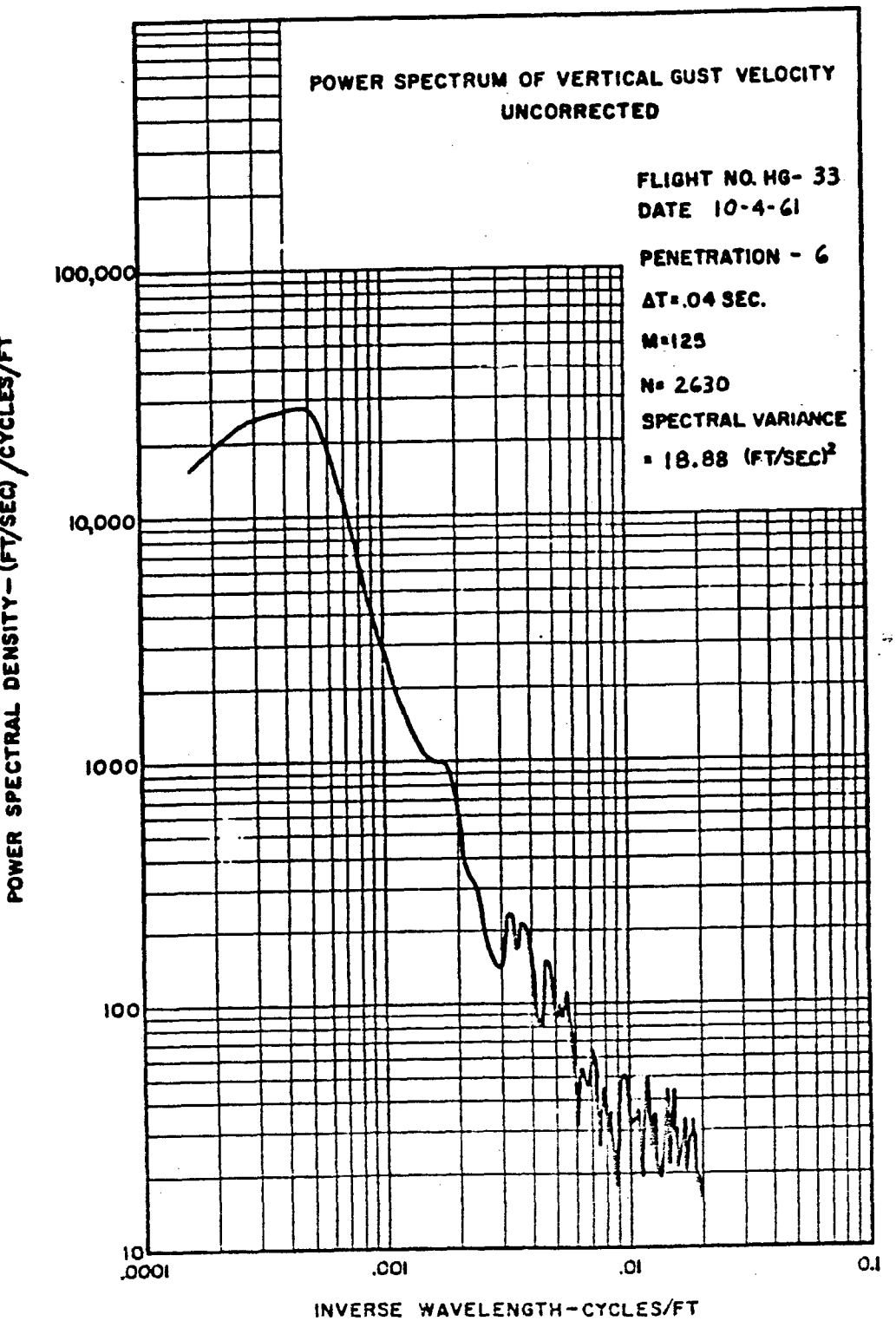

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 5
ΔT=.04 SEC.
N= 3580
SPECTRAL VARIANCE
= 8.61 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH–CYCLES/FT

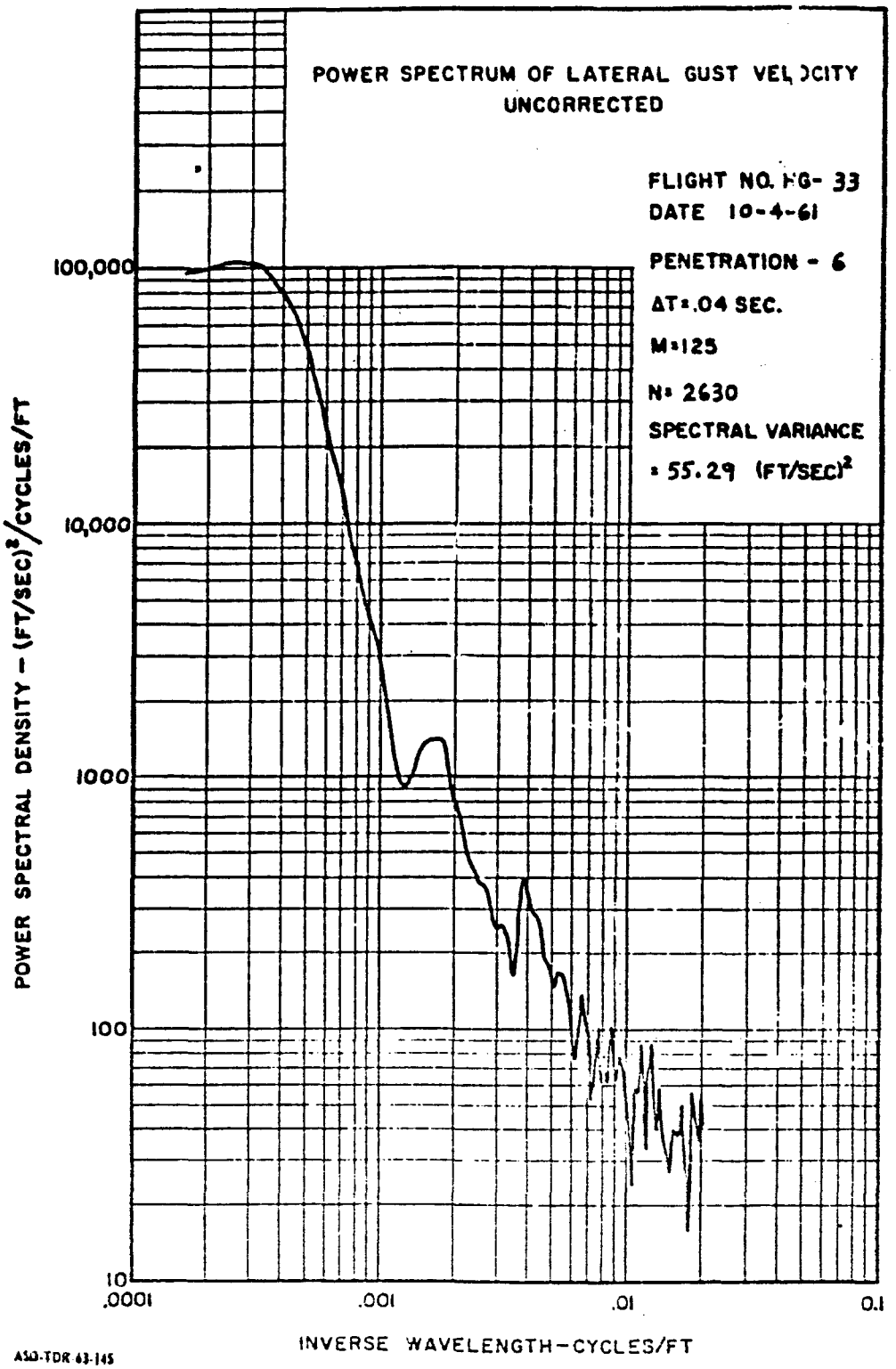

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 5
ΔT= 04 SEC.
M=125
N= 3880
SPECTRAL VARIANCE
= 47.55 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

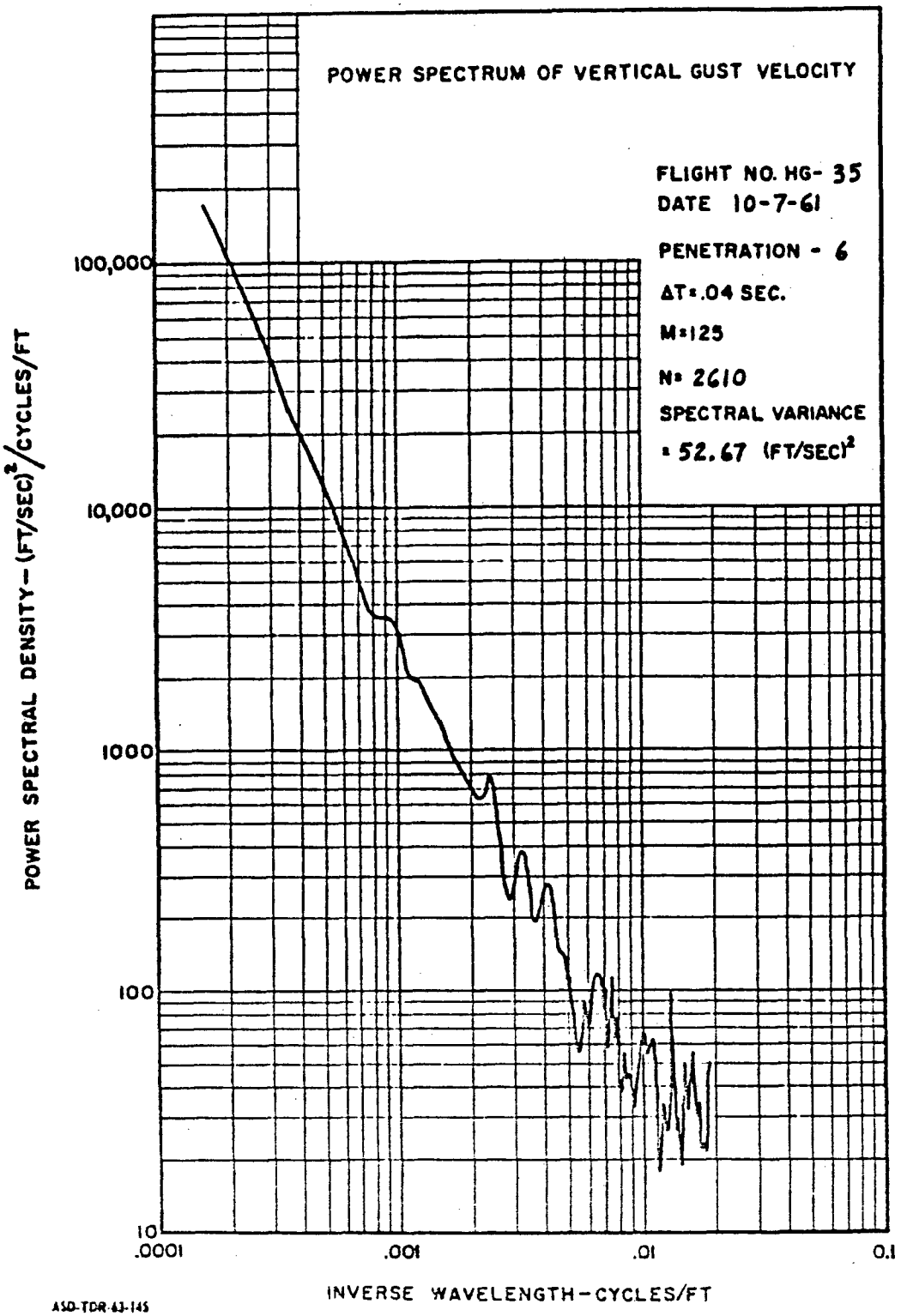

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 6
ΔT=.04 SEC.
M=[redacted]
N= 2630
SPECTRAL VARIANCE
= 21.92 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

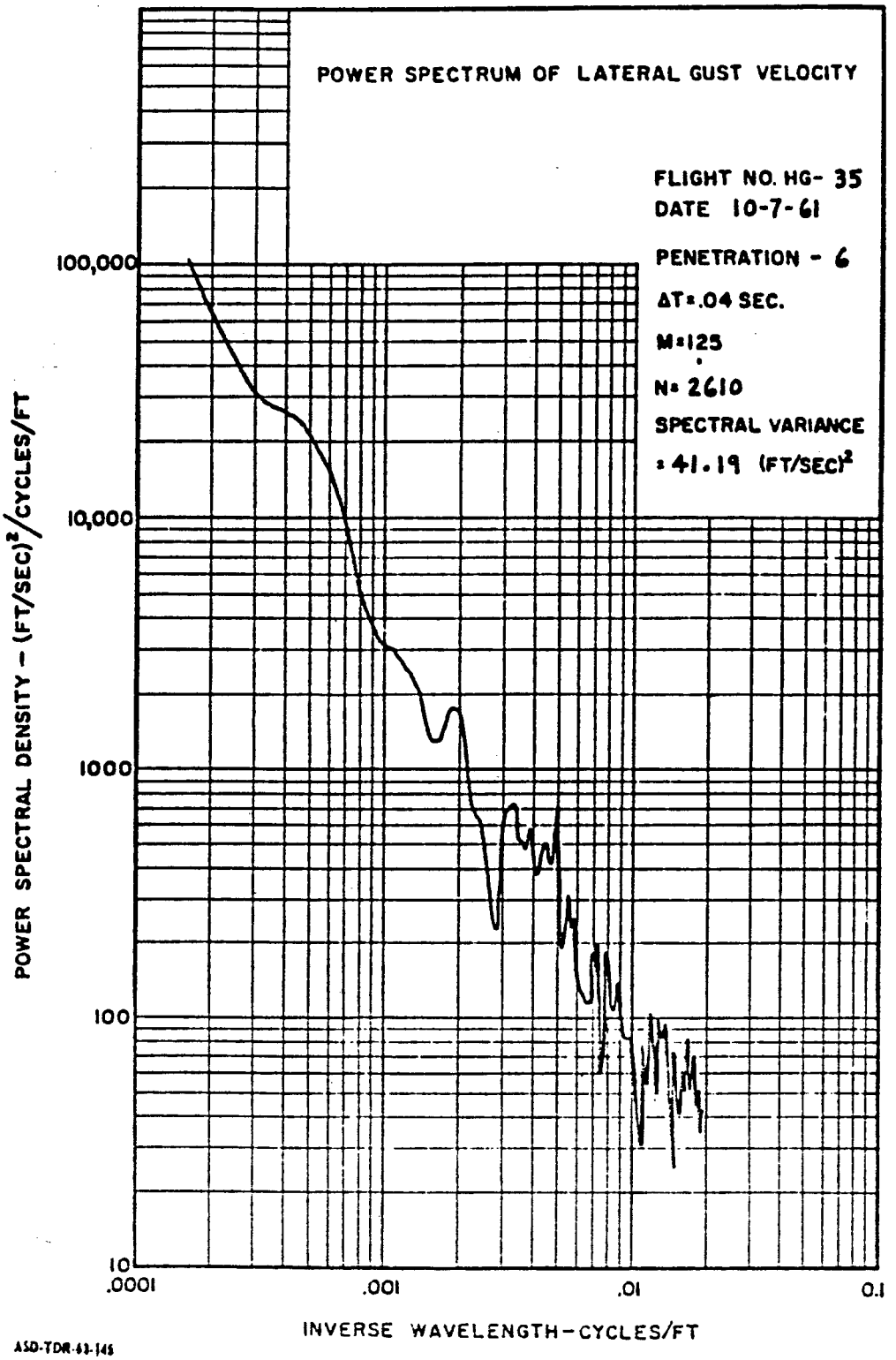

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 6
ΔT = .04 SEC.
M = 125
N = 2630
SPECTRAL VARIANCE
= 17.78 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

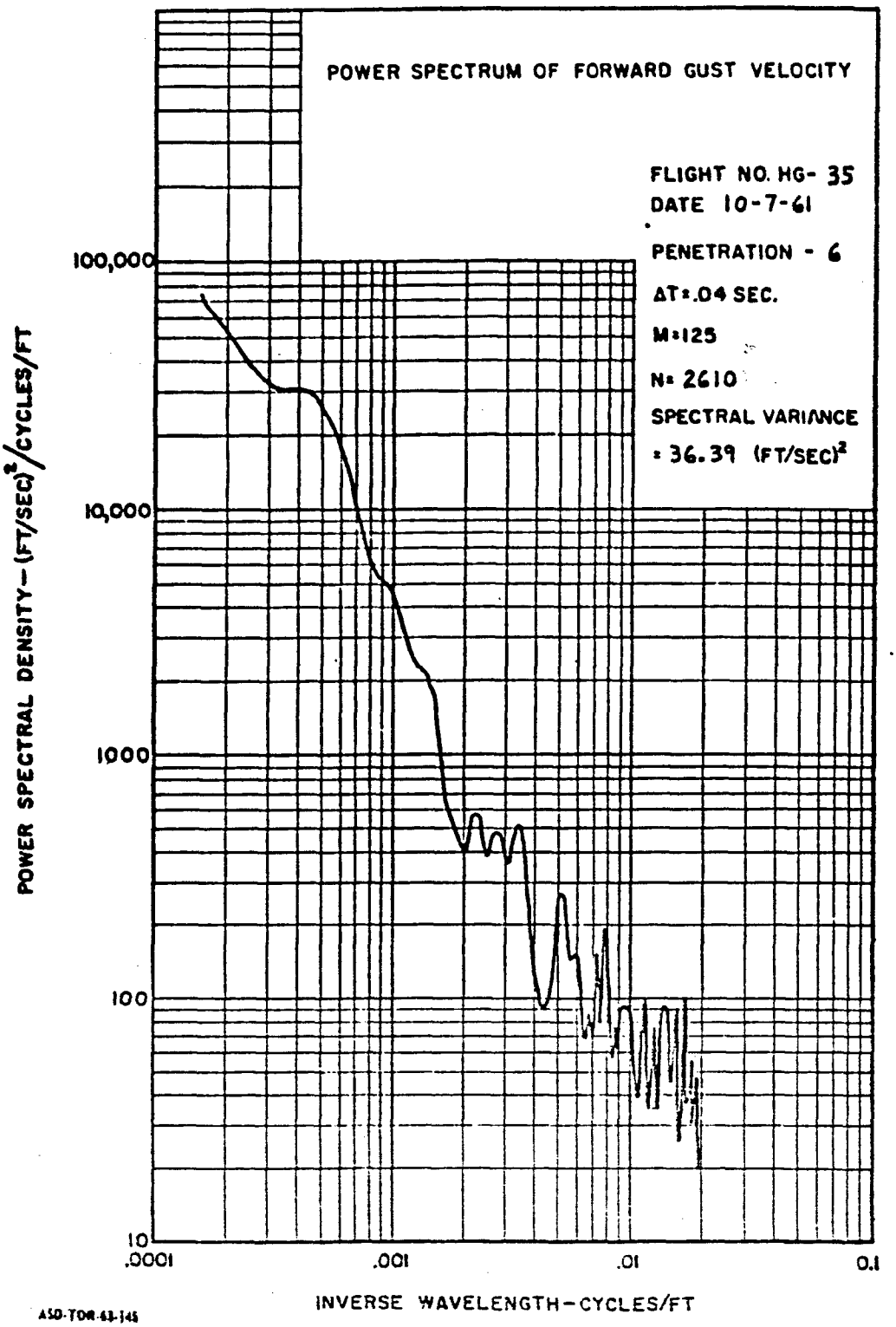

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2630
SPECTRAL VARIANCE
= 13.61 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

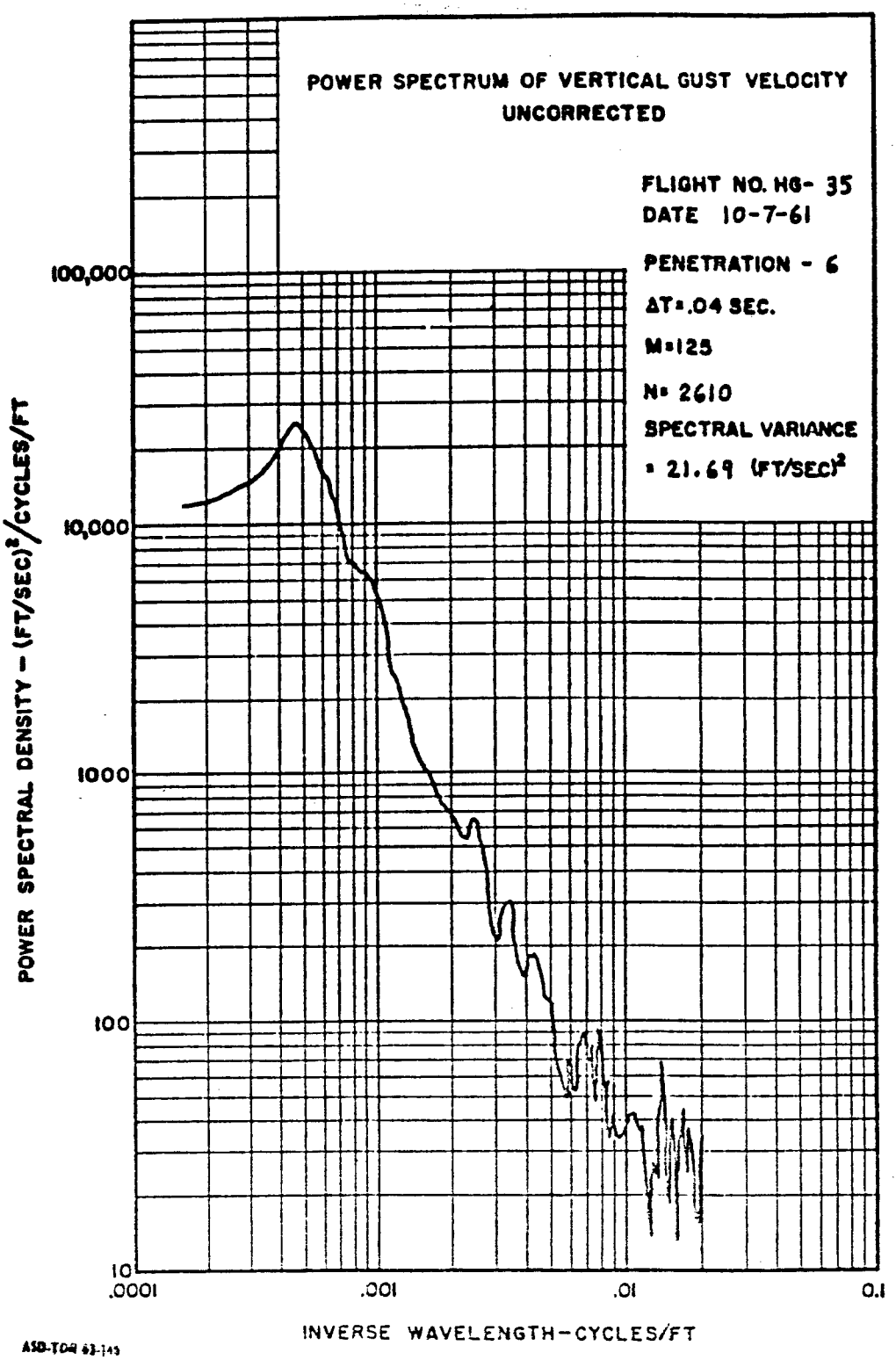

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 33
DATE 10-4-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2630
SPECTRAL VARIANCE
= 18.88 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

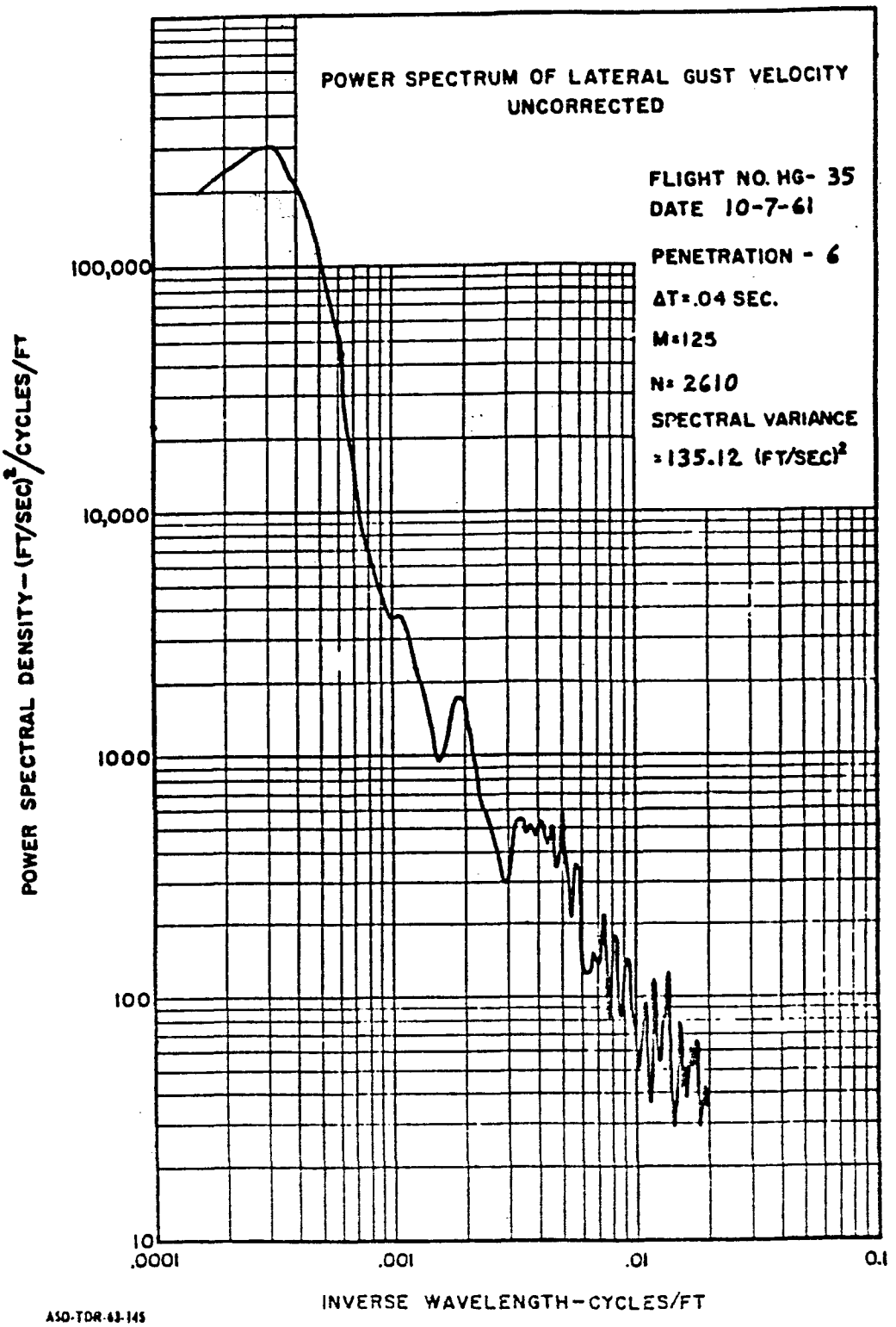

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. FG- 33
DATE 10-4-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2630
SPECTRAL VARIANCE
= 55.29 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

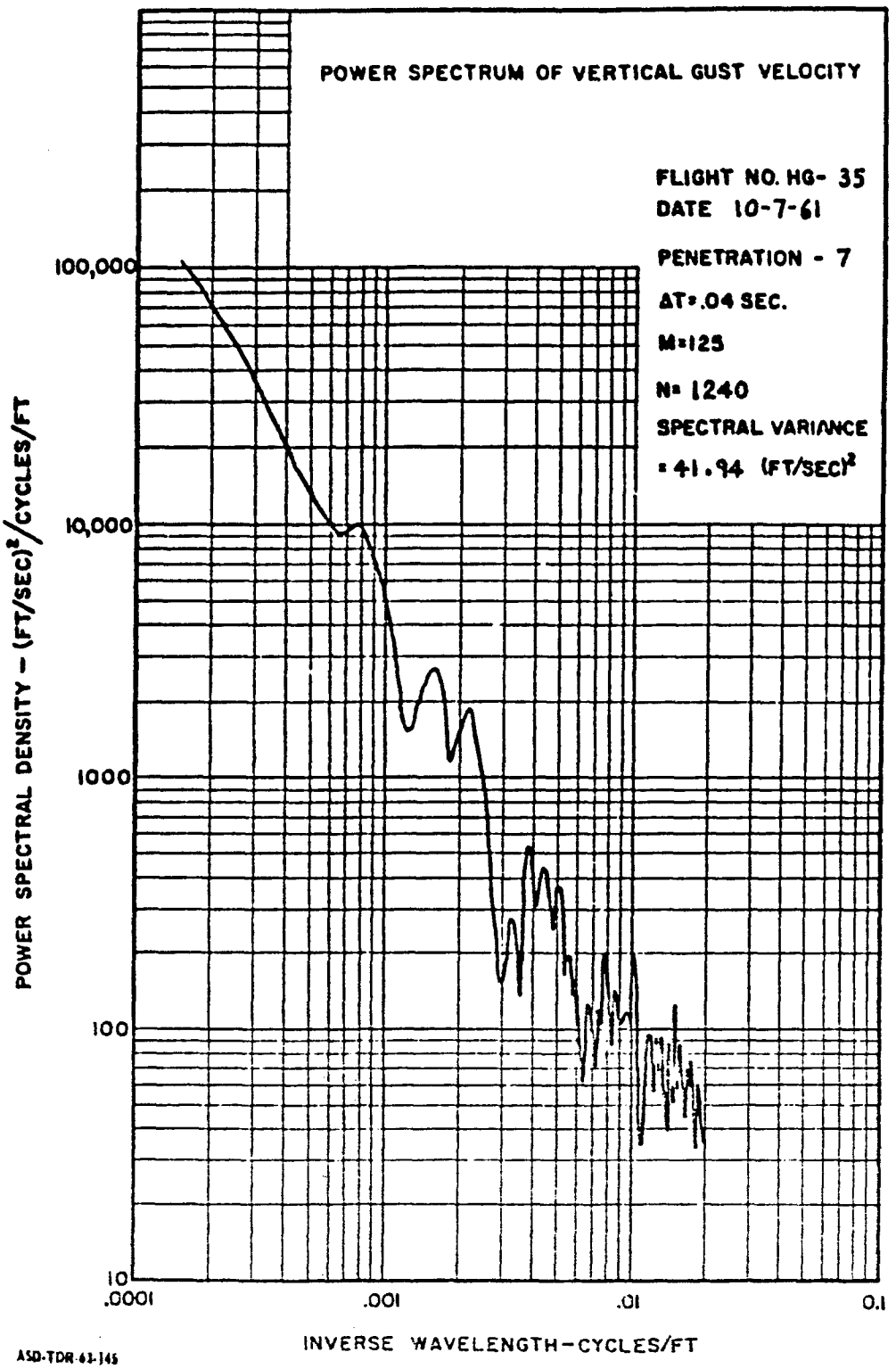

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2610
SPECTRAL VARIANCE
= 52.67 (FT/SEC)²
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH – CYCLES/FT

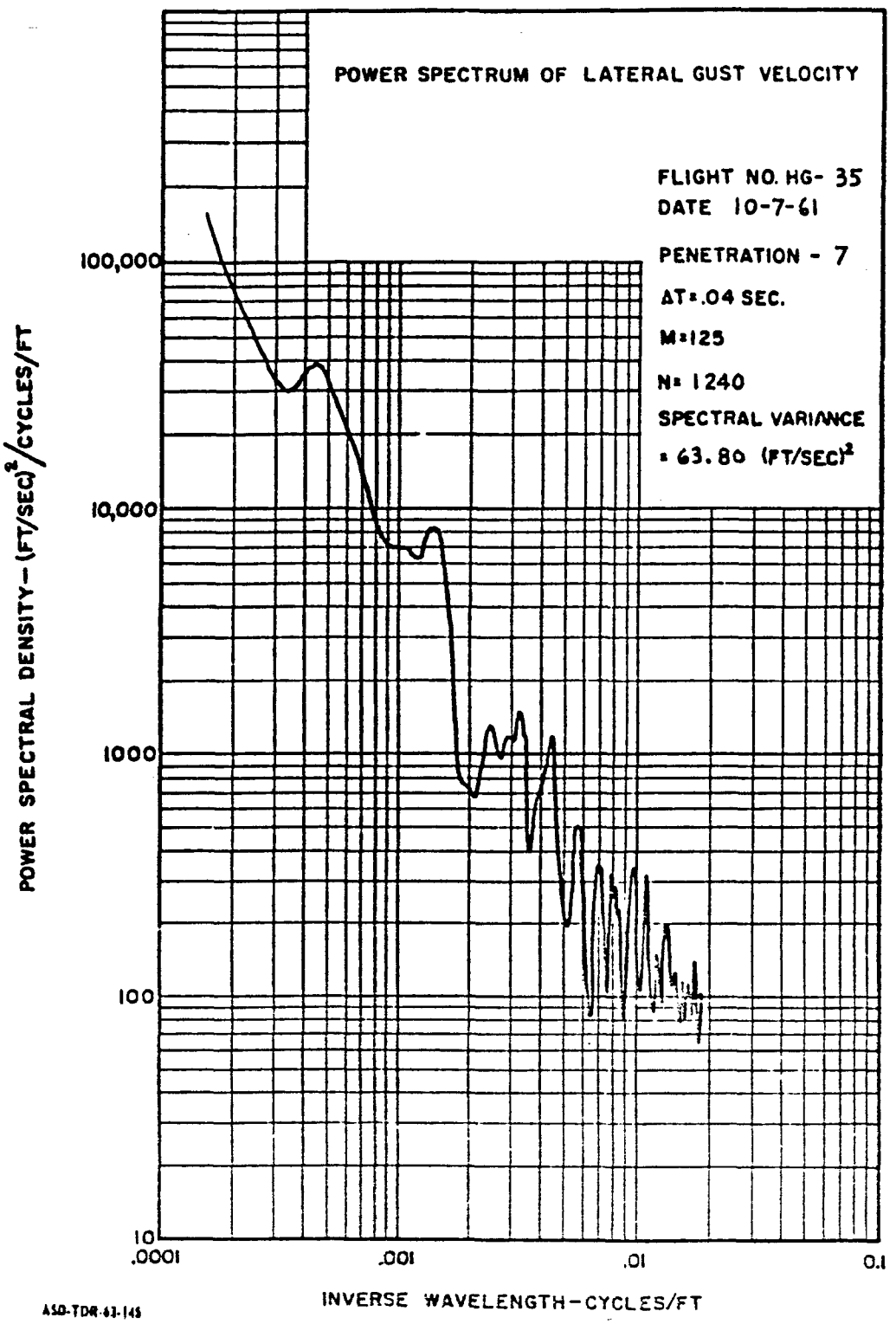

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2610
SPECTRAL VARIANCE
=41.19 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

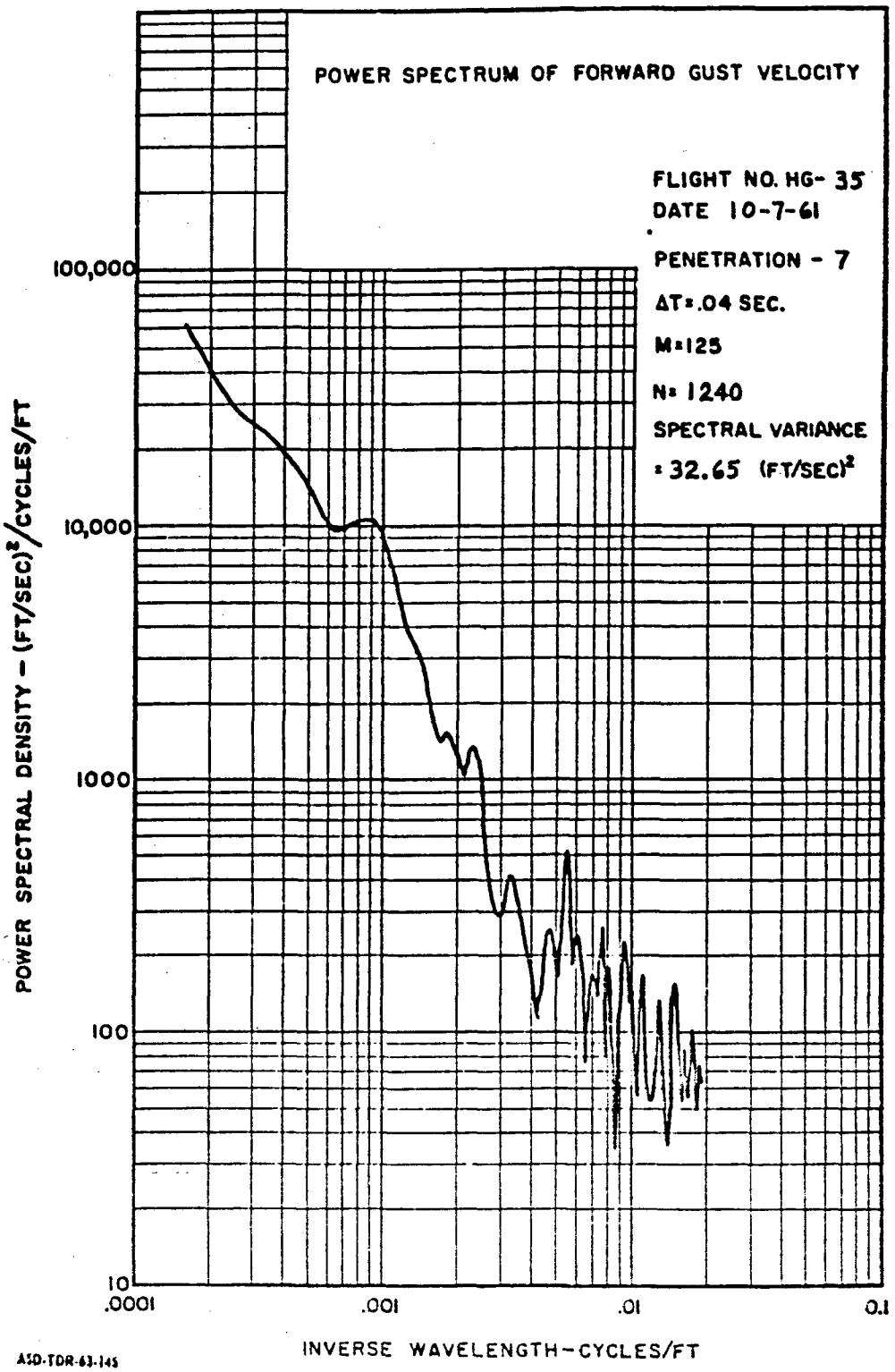

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2610
SPECTRAL VARIANCE
= 36.39 (FT/SEC)²
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH – CYCLES/FT

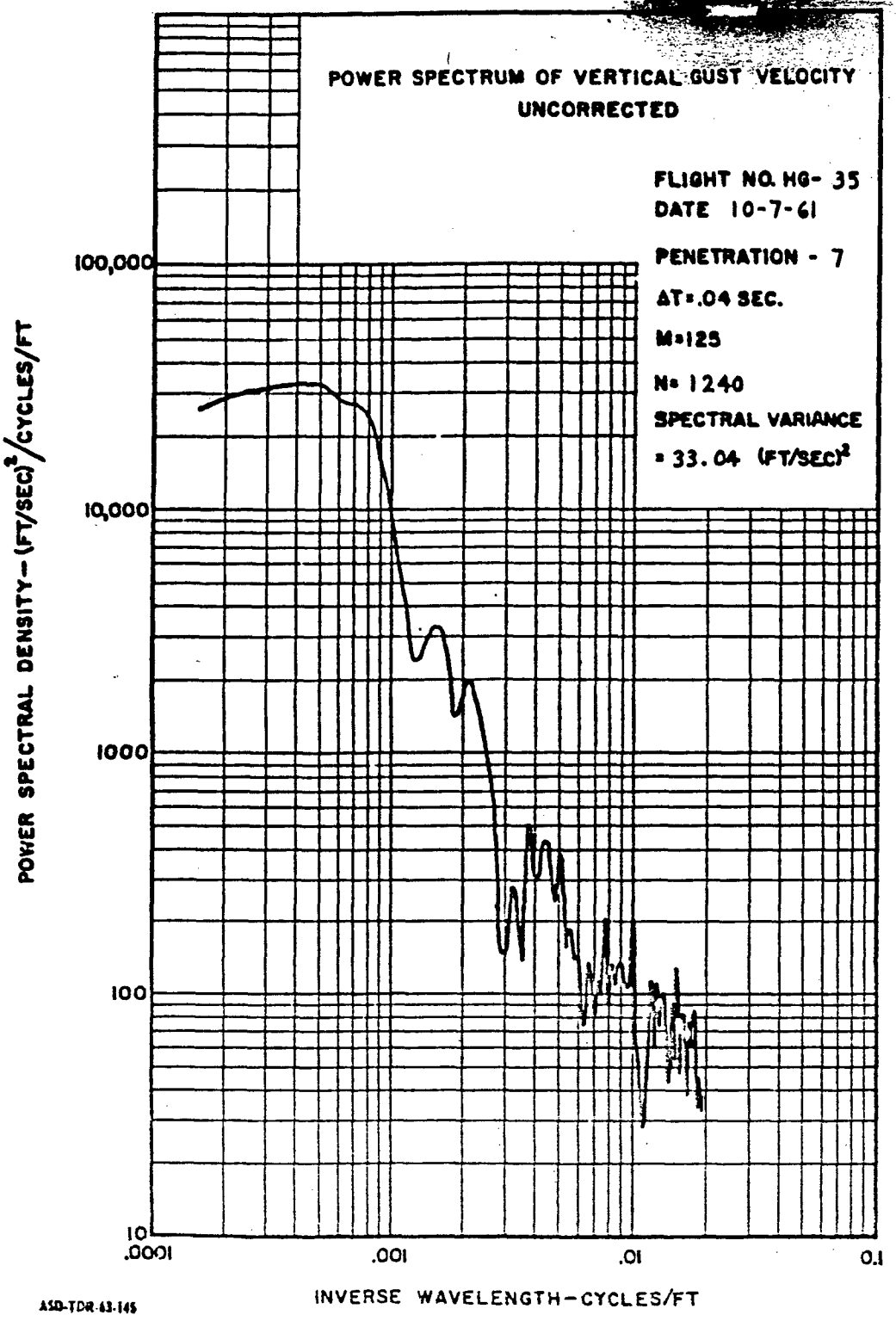

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 6
ΔT=.04 SEC.
M=1.25
N= 2610
SPECTRAL VARIANCE
= 21.69 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

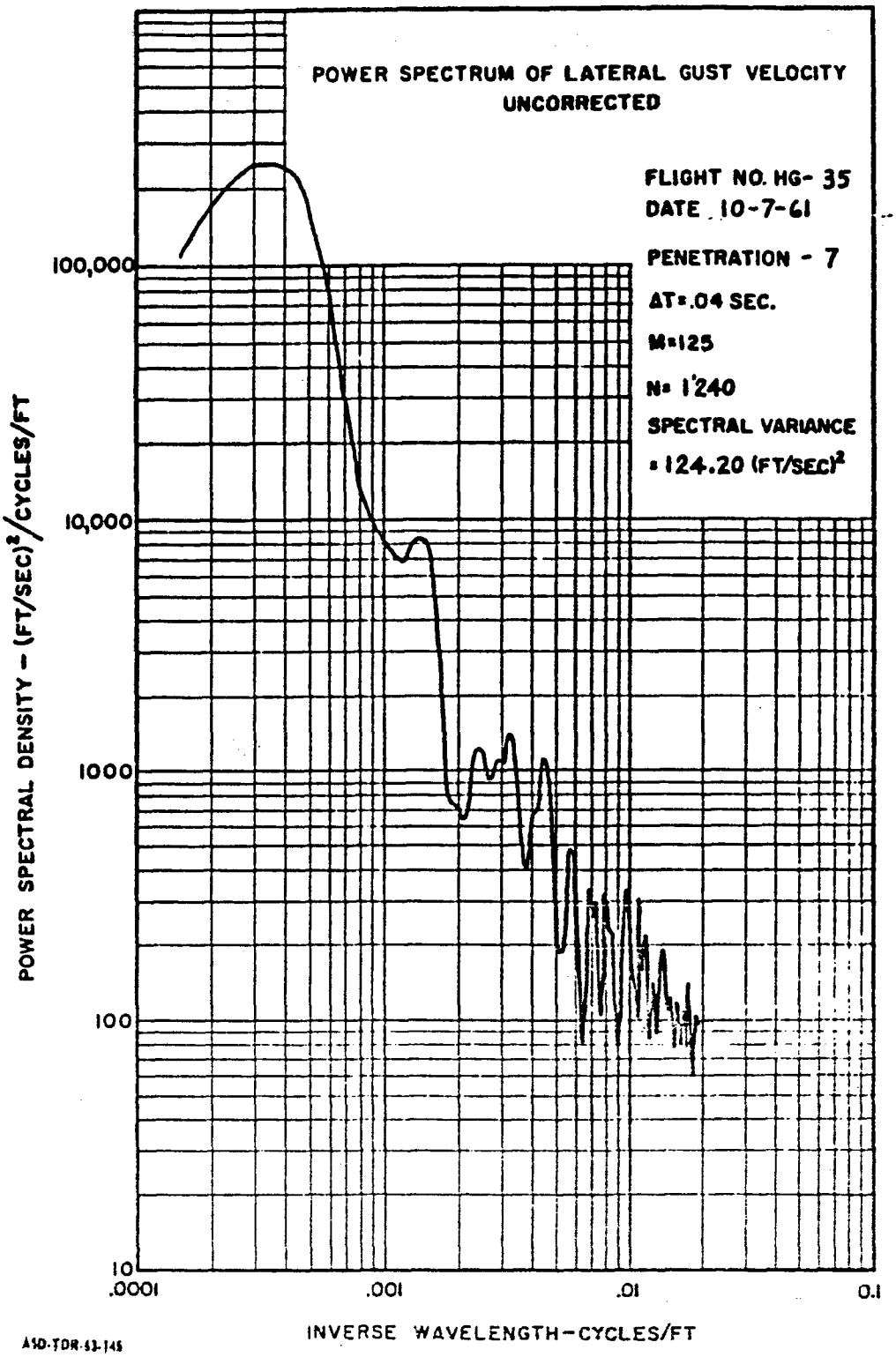

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 2610
SPECTRAL VARIANCE
=135.12 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

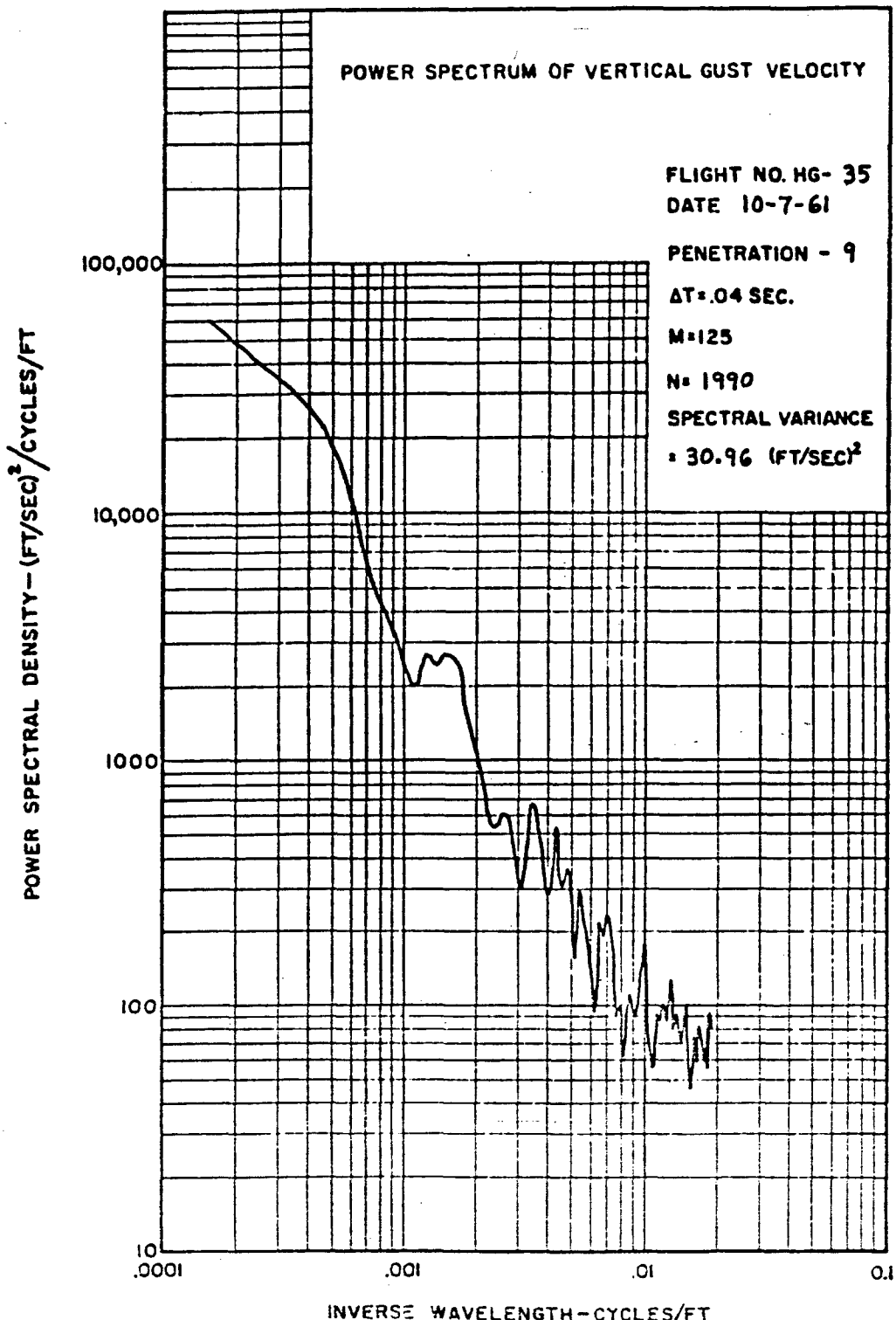

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 1240
SPECTRAL VARIANCE
=41.94 (FT/SEC)²
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH–CYCLES/FT

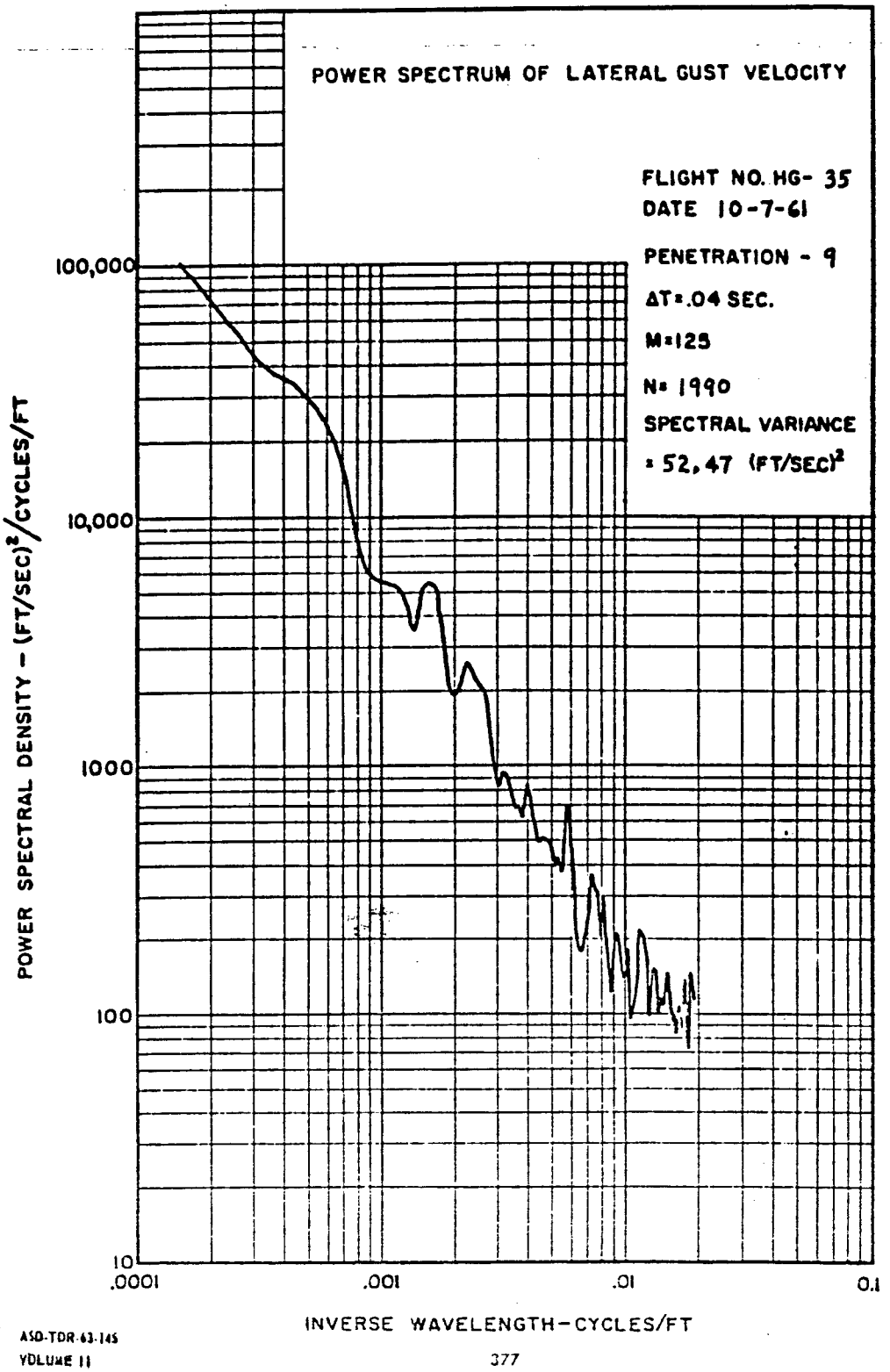

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 1240
SPECTRAL VARIANCE
= 63.80 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

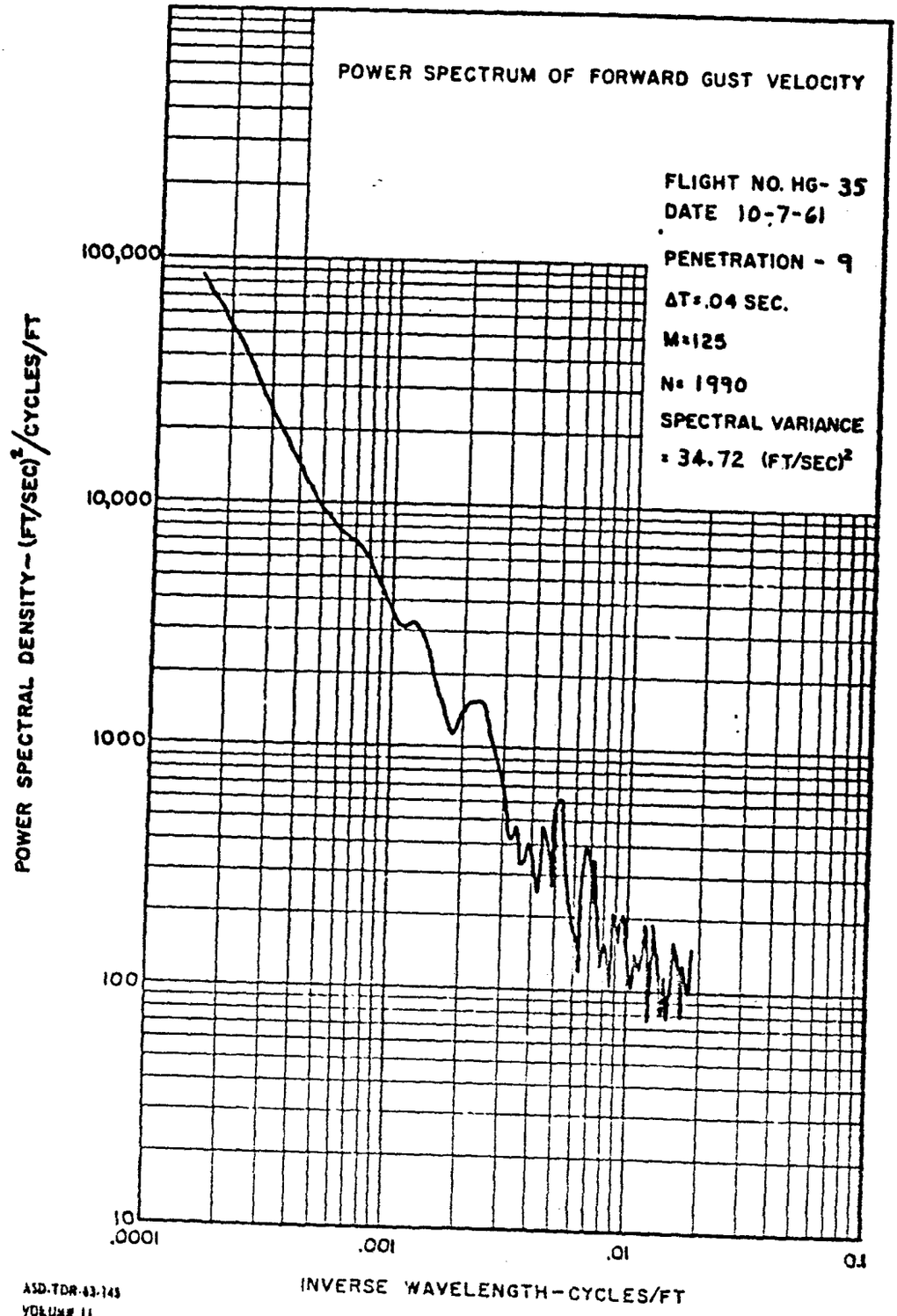

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 1240
SPECTRAL VARIANCE
= 32.65 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

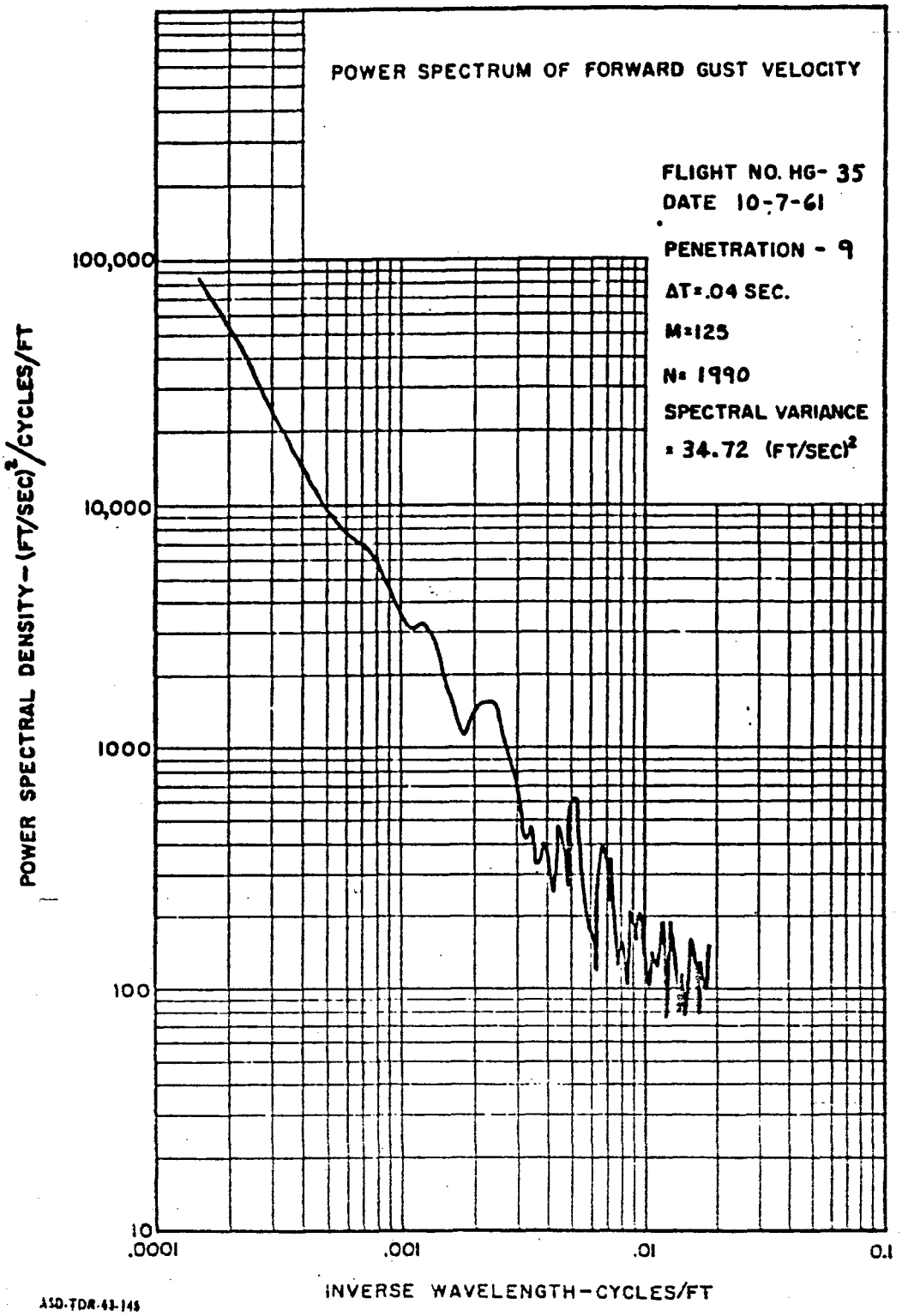

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 1240
SPECTRAL VARIANCE
= 33.04 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

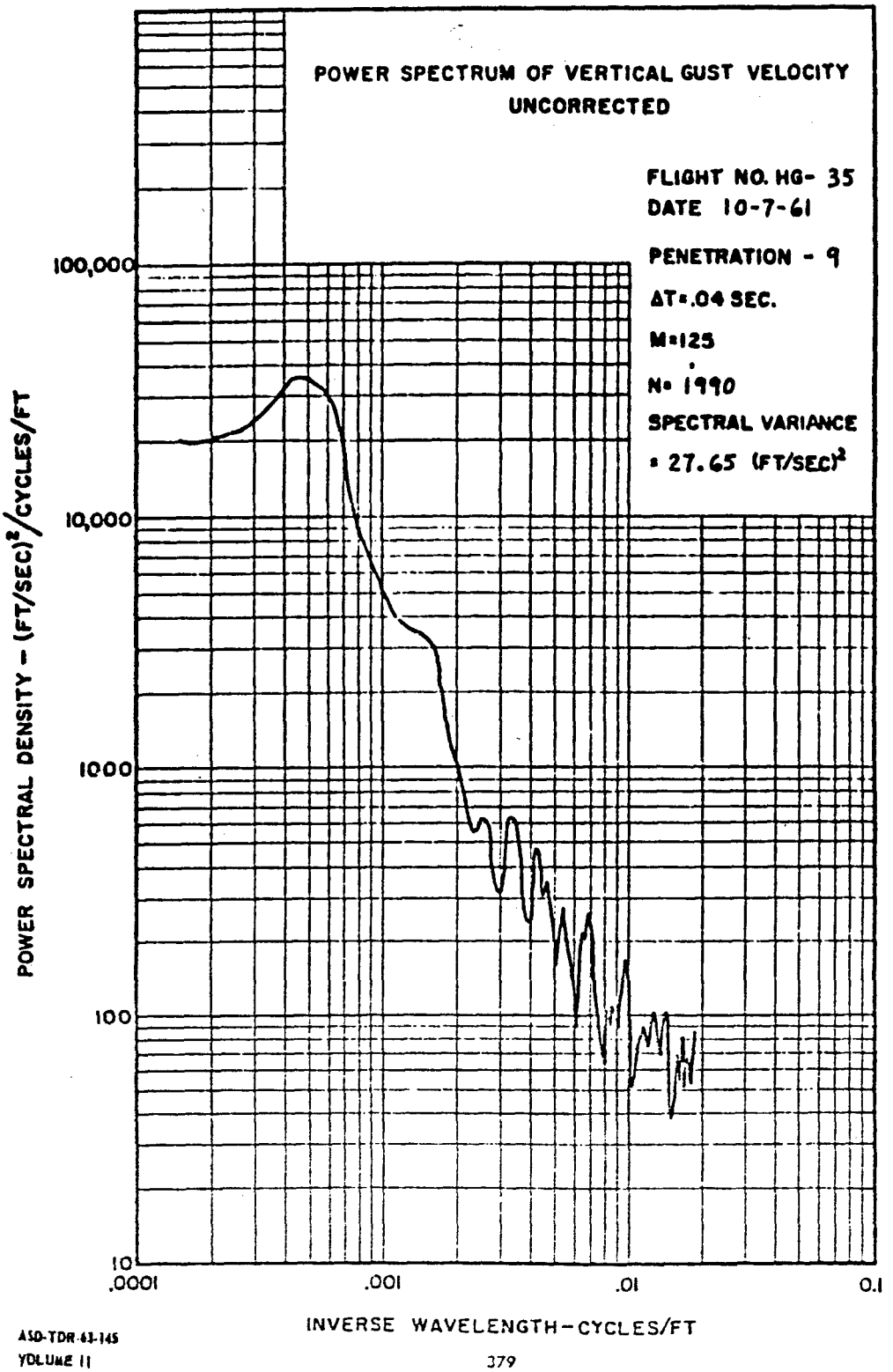

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 1'240
SPECTRAL VARIANCE
= 124.20 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

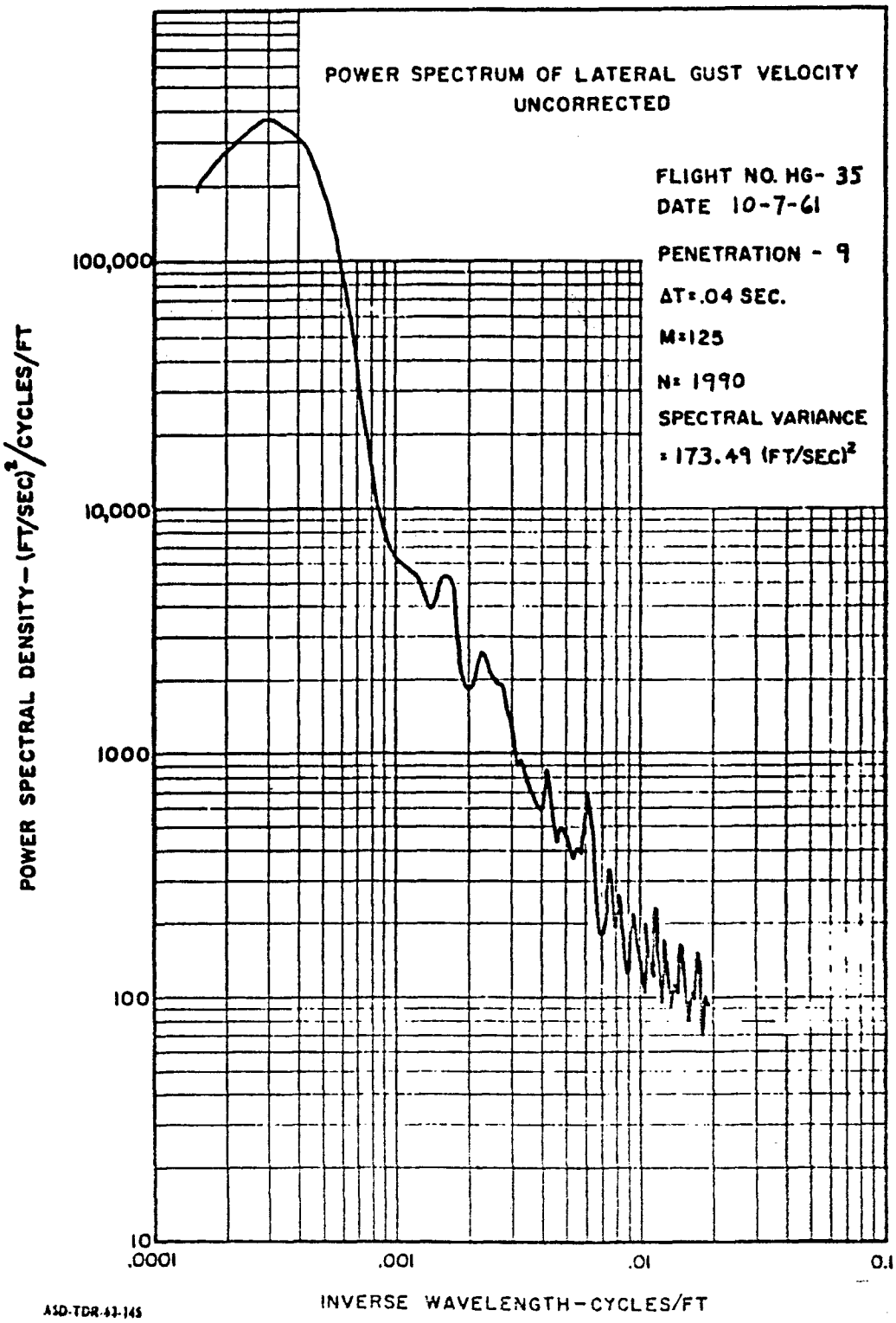

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 30.96 (FT/SEC)²
POWER SPECTRAL DENSITY—(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH—CYCLES/FT

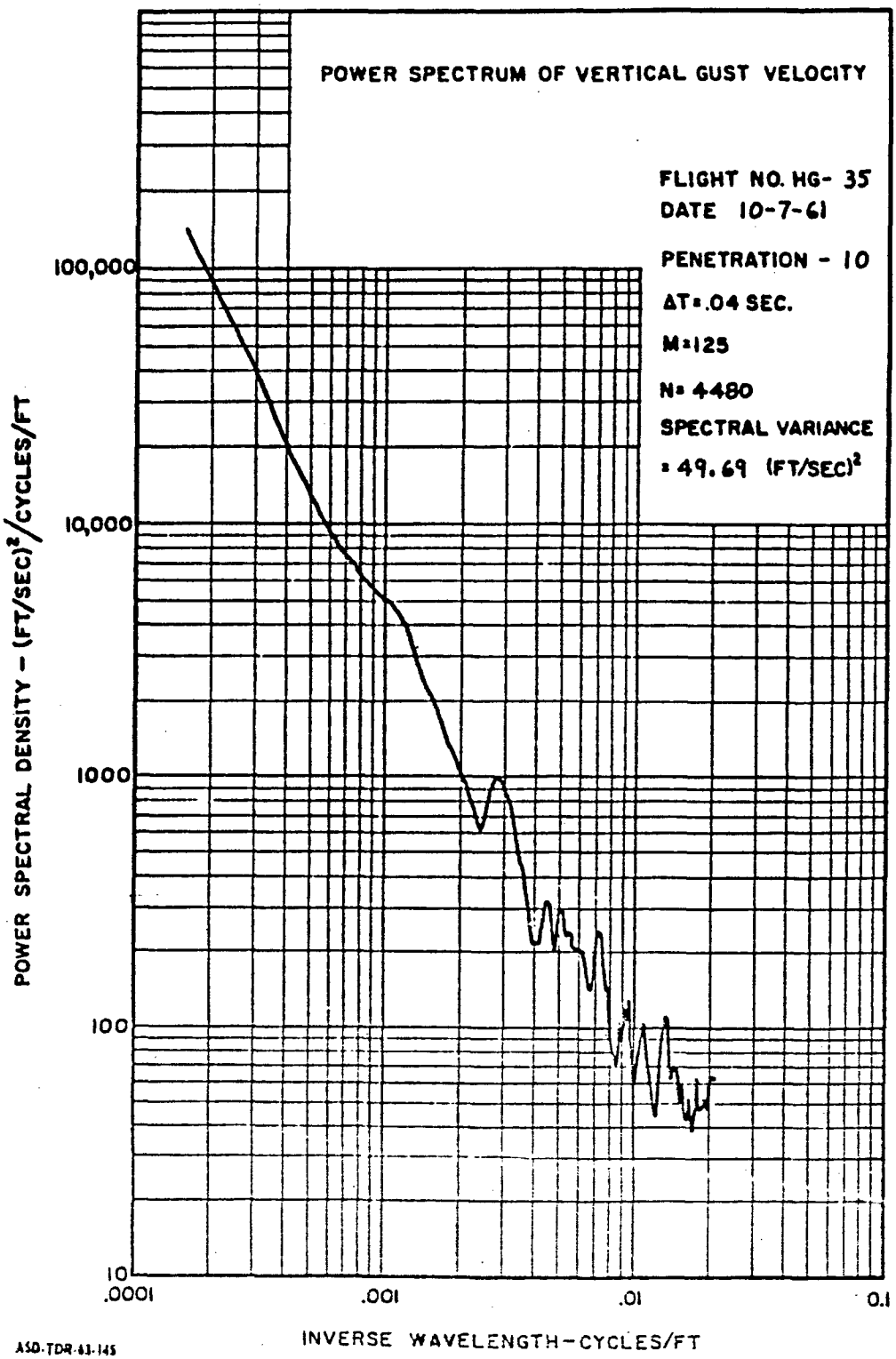

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 9
ΔT=.04 SEC.
M=128
N= 1990
SPECTRAL VARIANCE
= 52.47 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

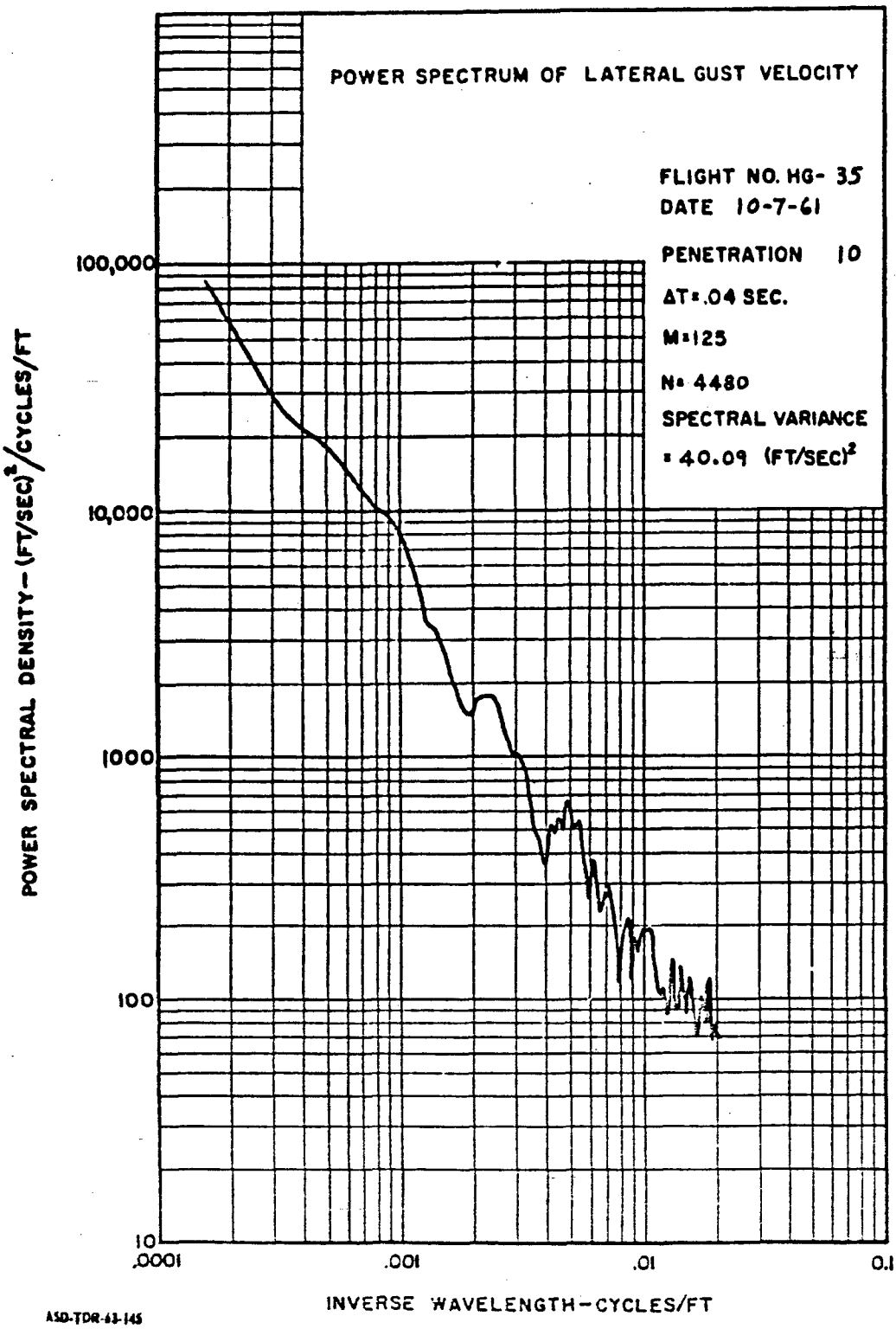

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 34.72 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

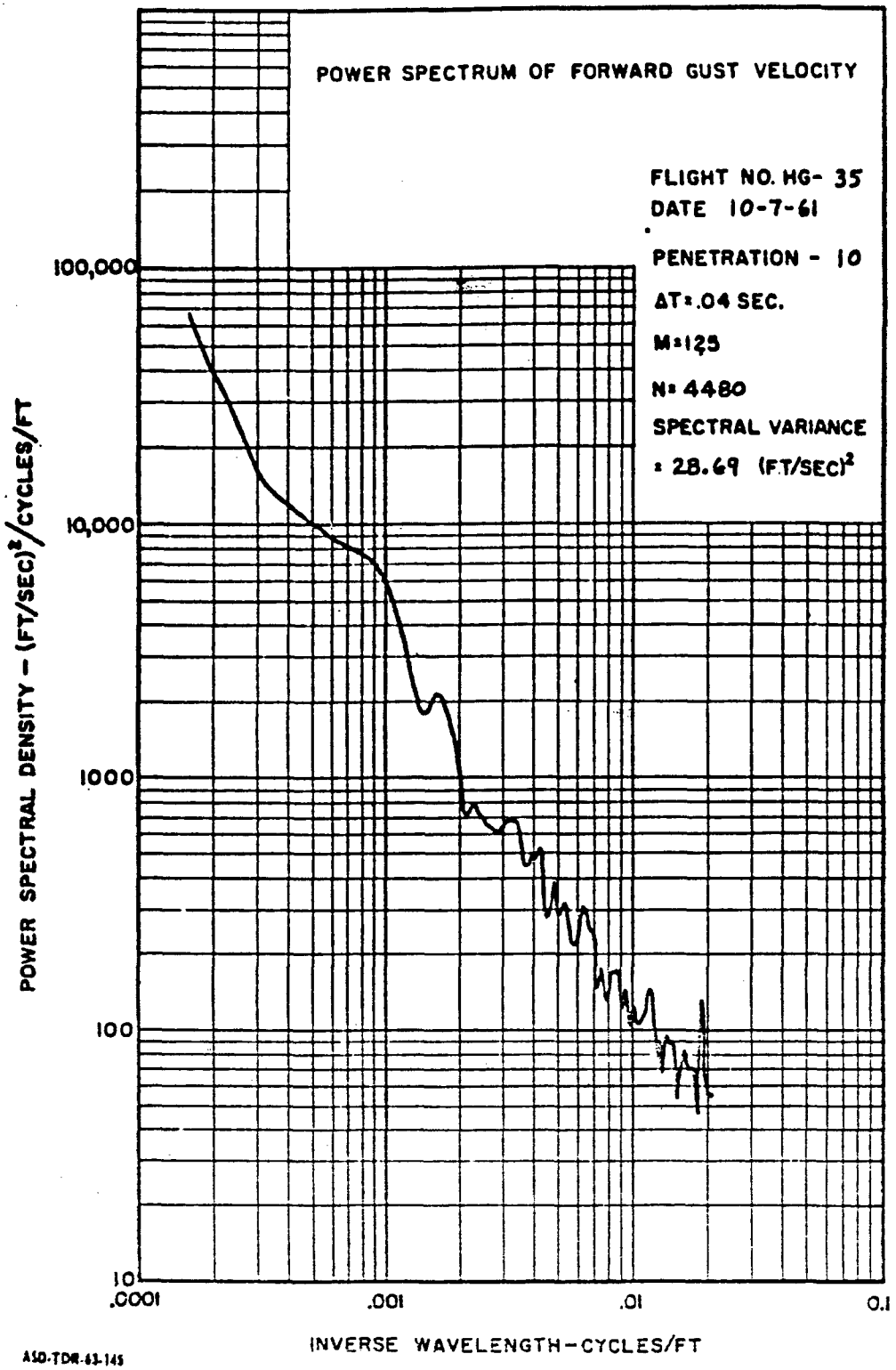

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 34.72 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

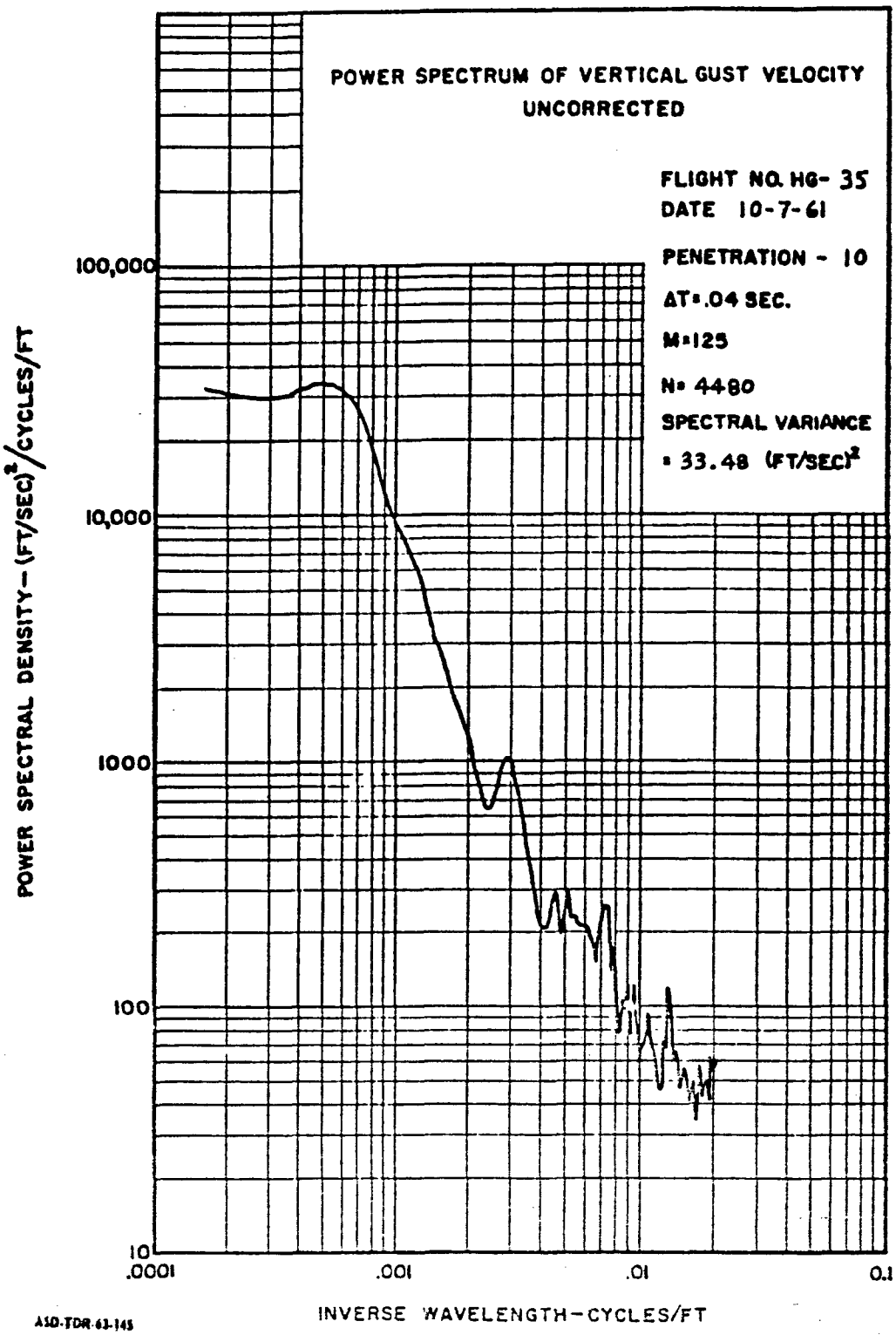

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 27.65 (FT/SEC)²
100,000
10,000
1000
100
10
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

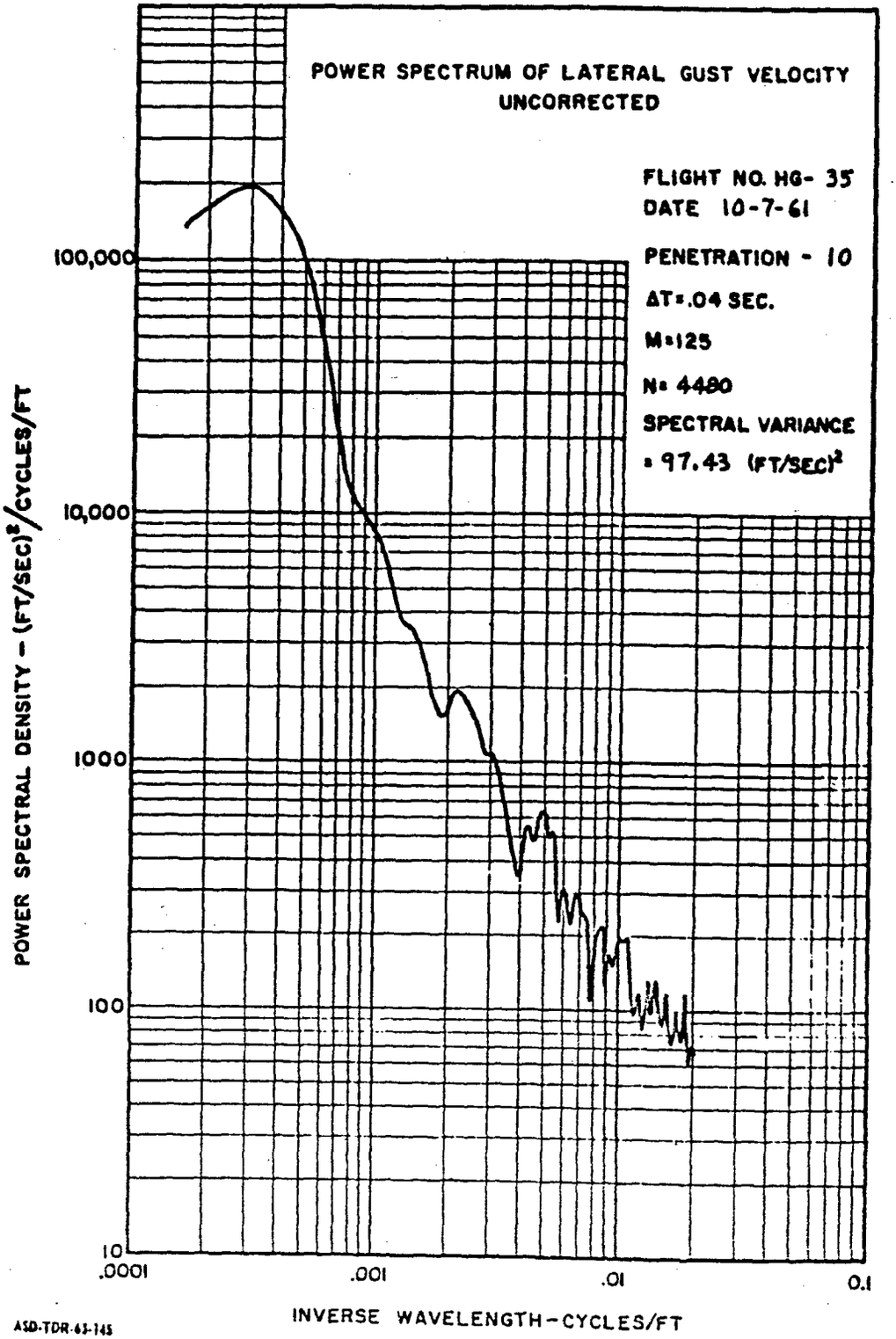

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 1990
SPECTRAL VARIANCE
= 173.49 (FT/SEC)²
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH – CYCLES/FT

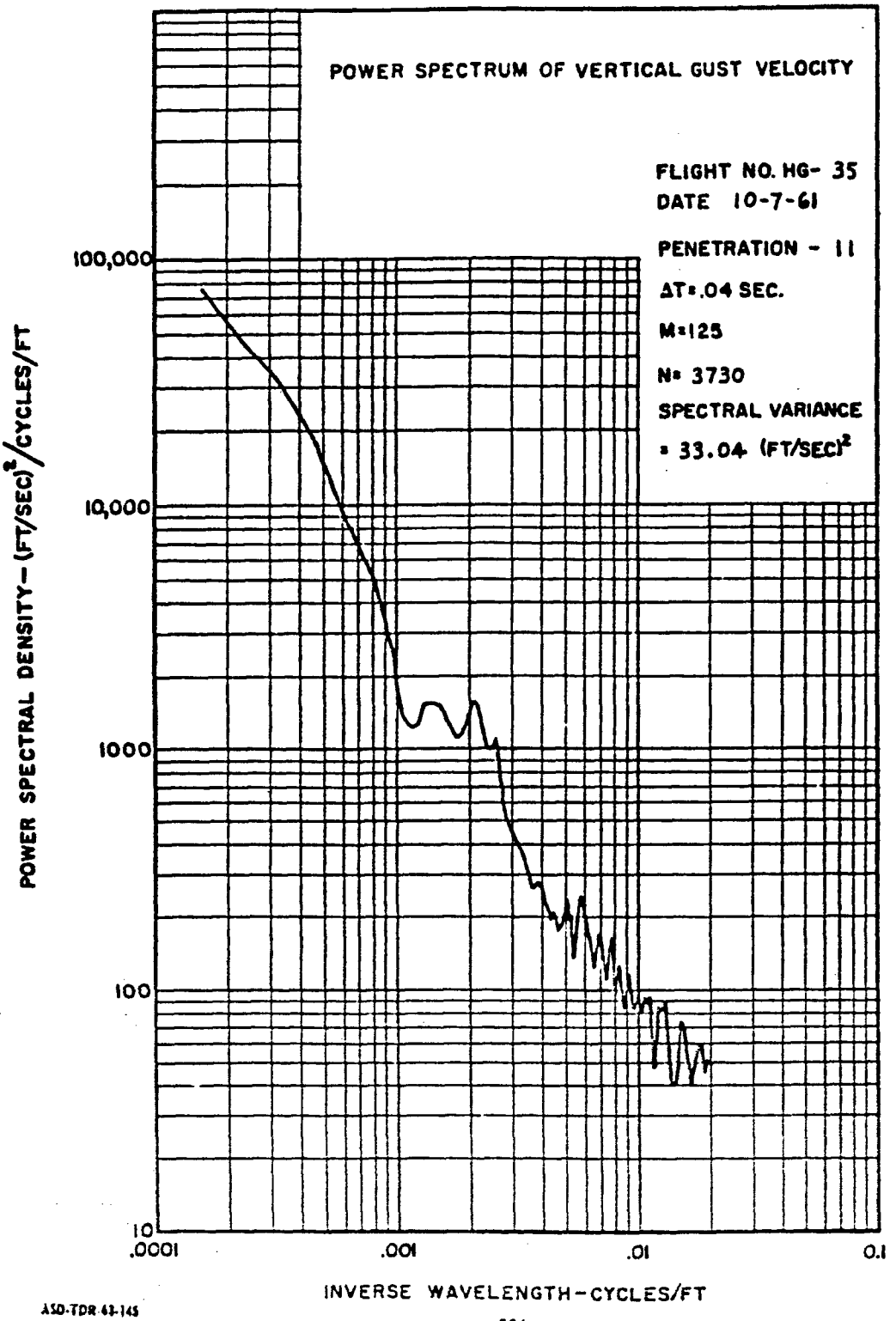

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 4480
SPECTRAL VARIANCE
= 49.69 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

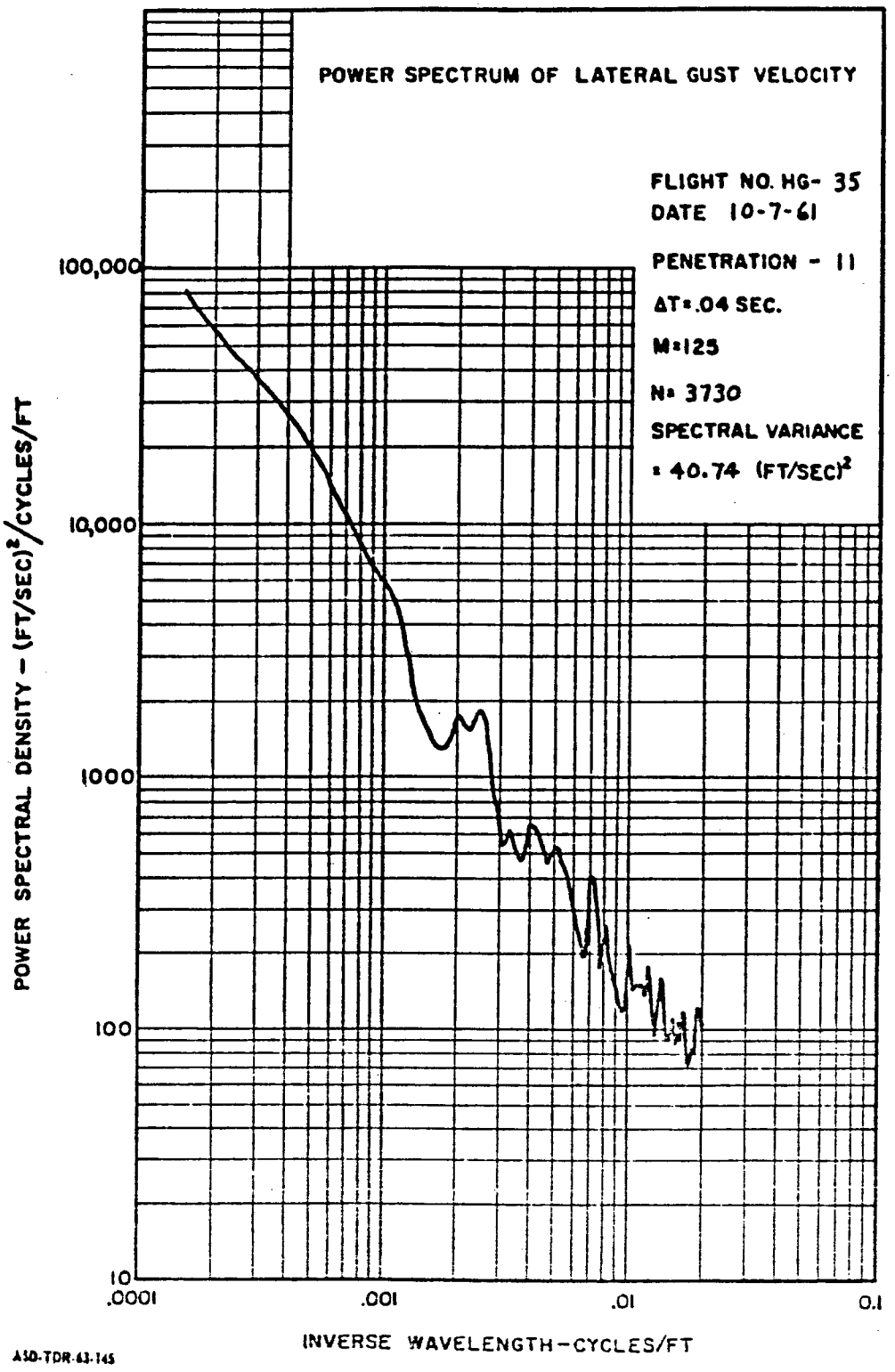

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION 10
ΔT=.04 SEC.
M=125
N= 4480
SPECTRAL VARIANCE
= 40.09 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

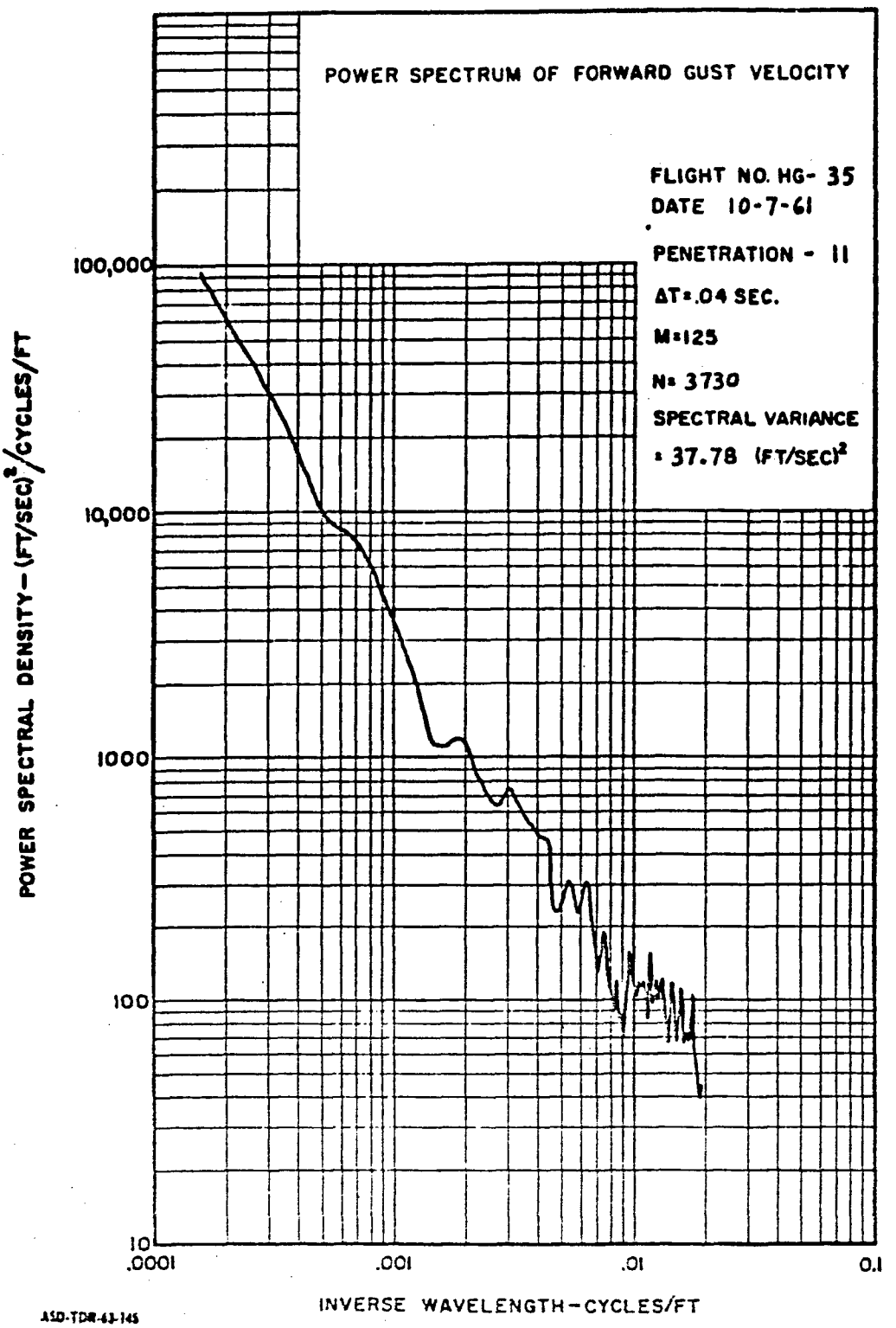

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N=4480
SPECTRAL VARIANCE
= 28.69 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

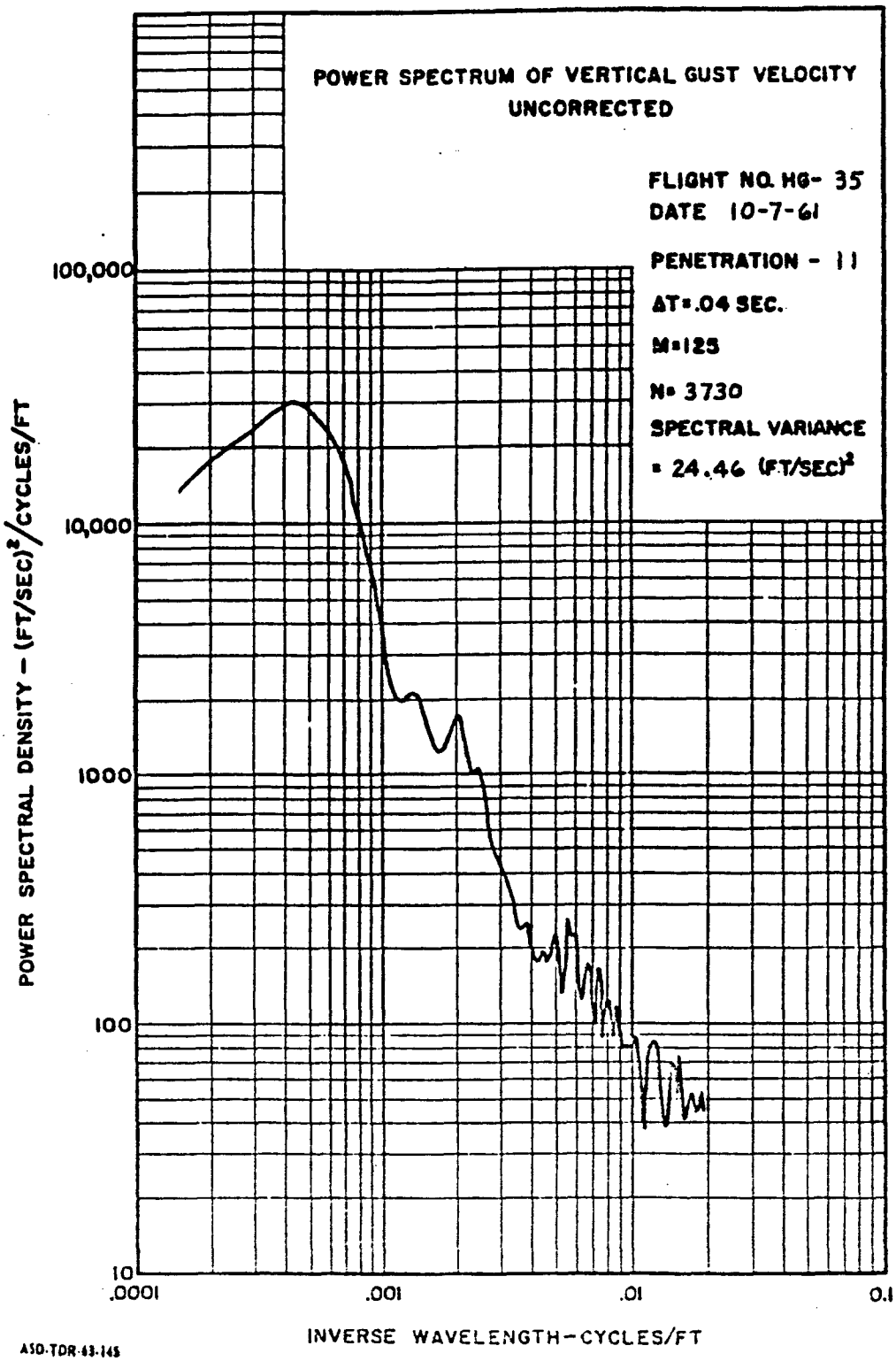

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 4480
SPECTRAL VARIANCE
= 33.48 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

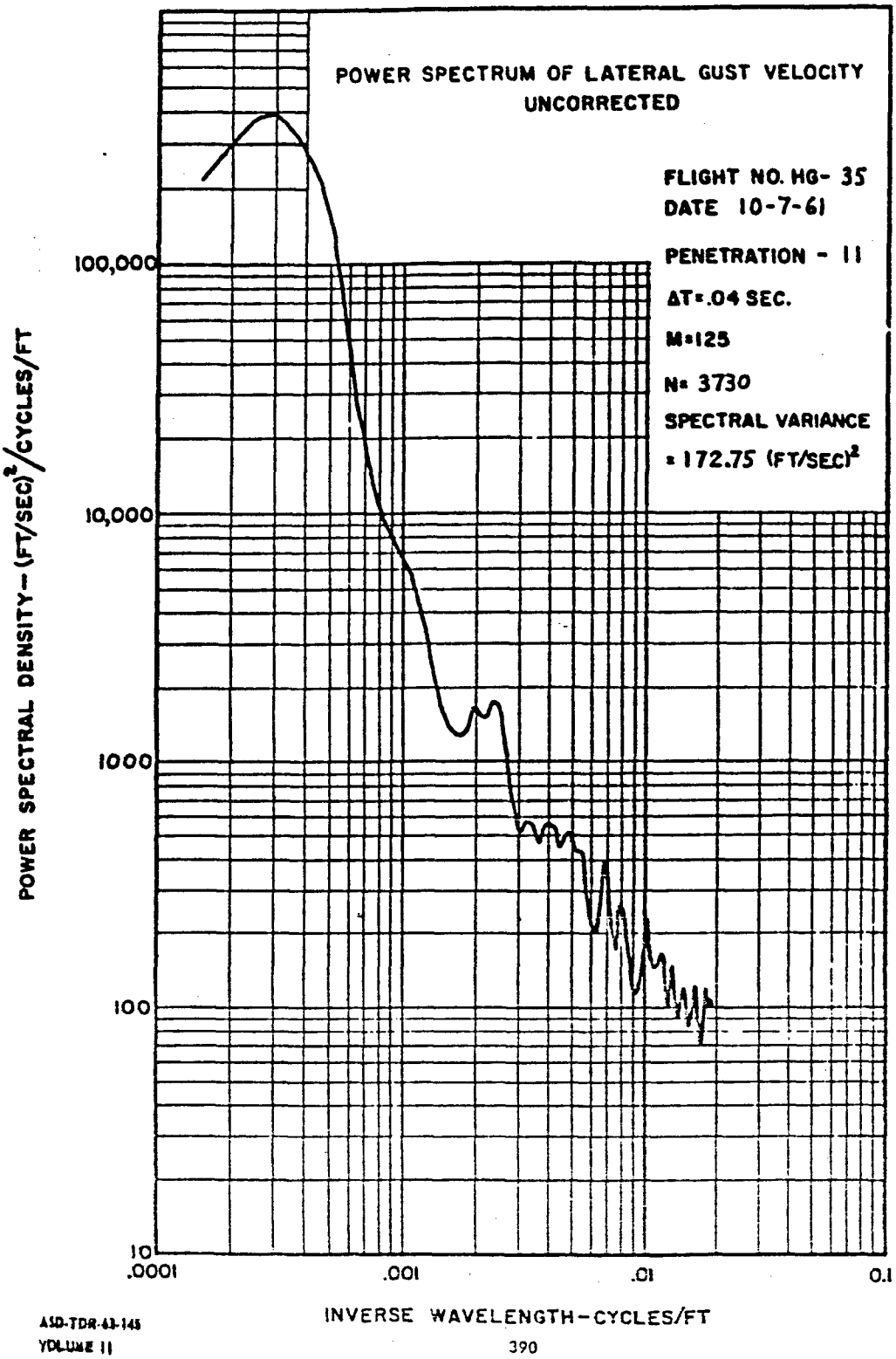

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 4480
SPECTRAL VARIANCE
= 97.43 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

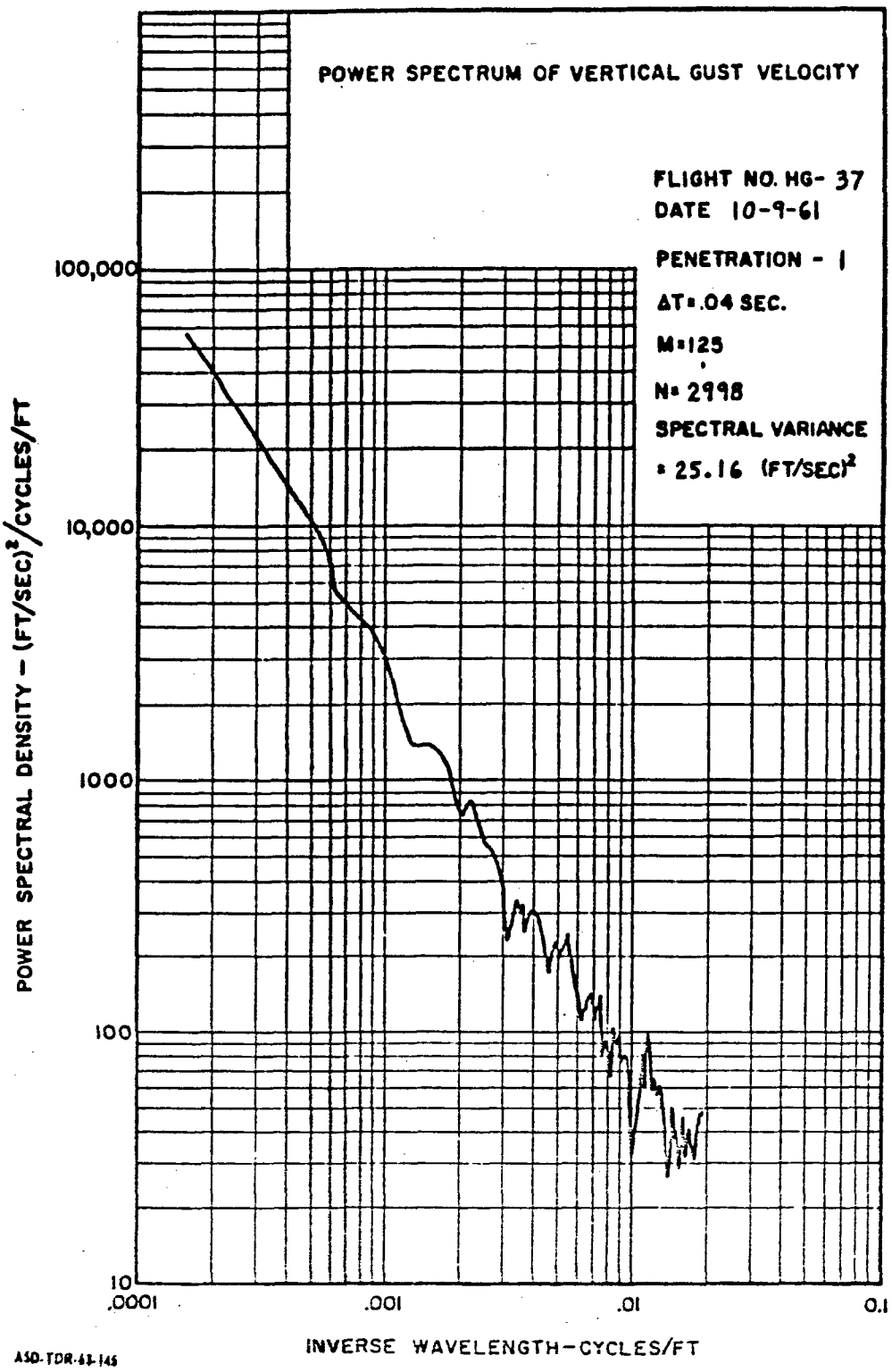

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 3730
SPECTRAL VARIANCE
= 33.04 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

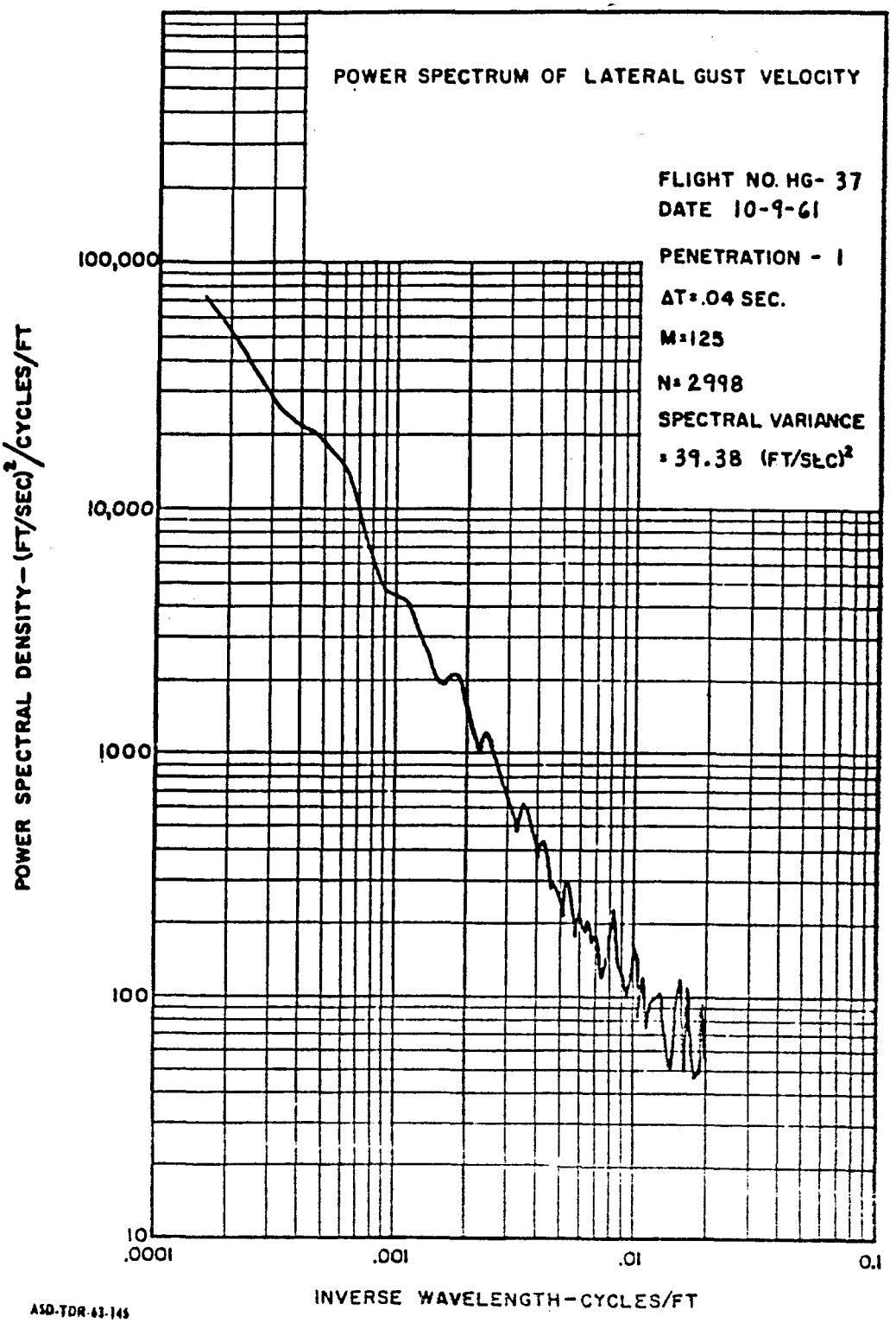

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 3730
SPECTRAL VARIANCE
= 40.74 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

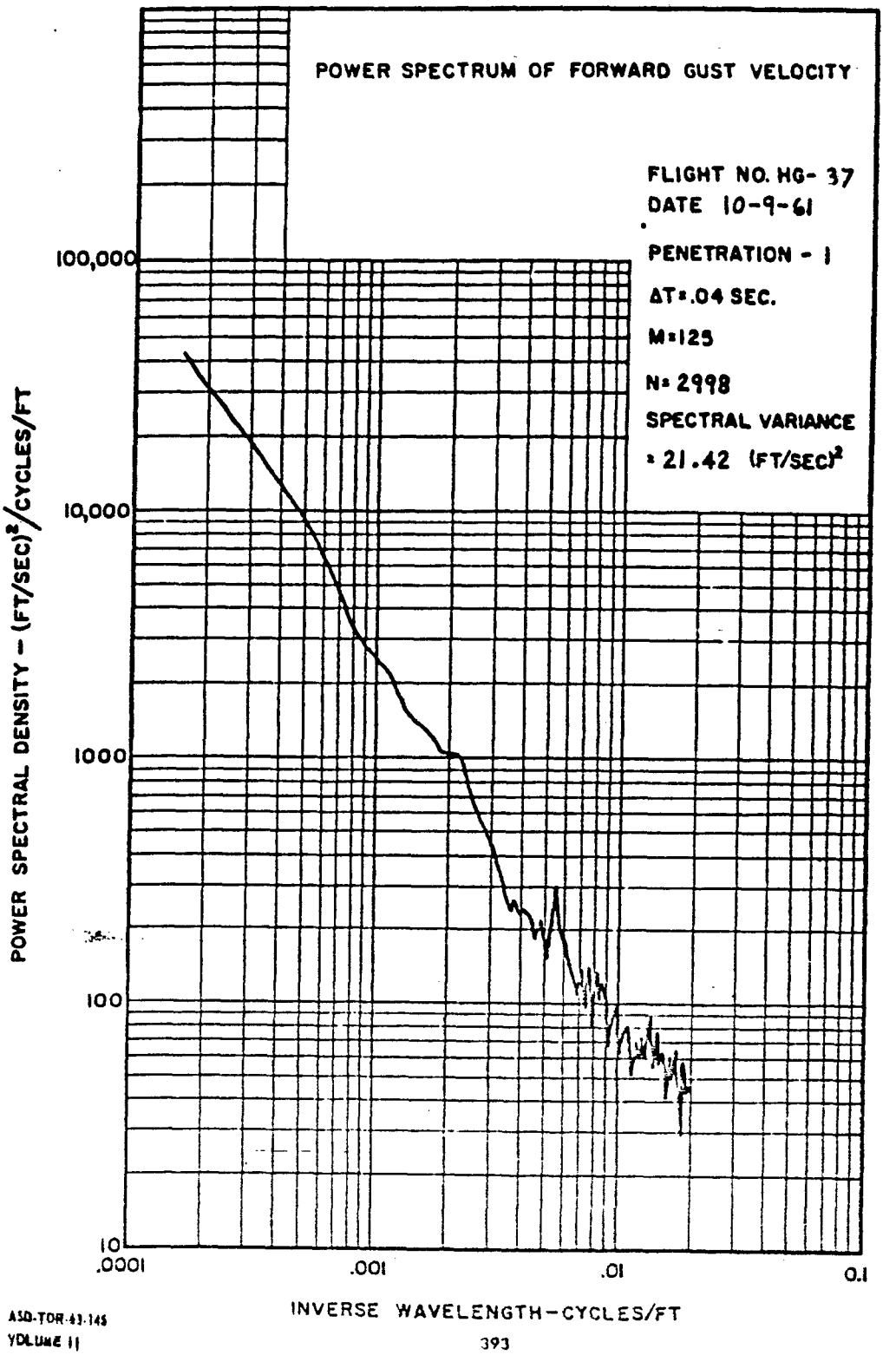

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 3730
SPECTRAL VARIANCE
= 37.78 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

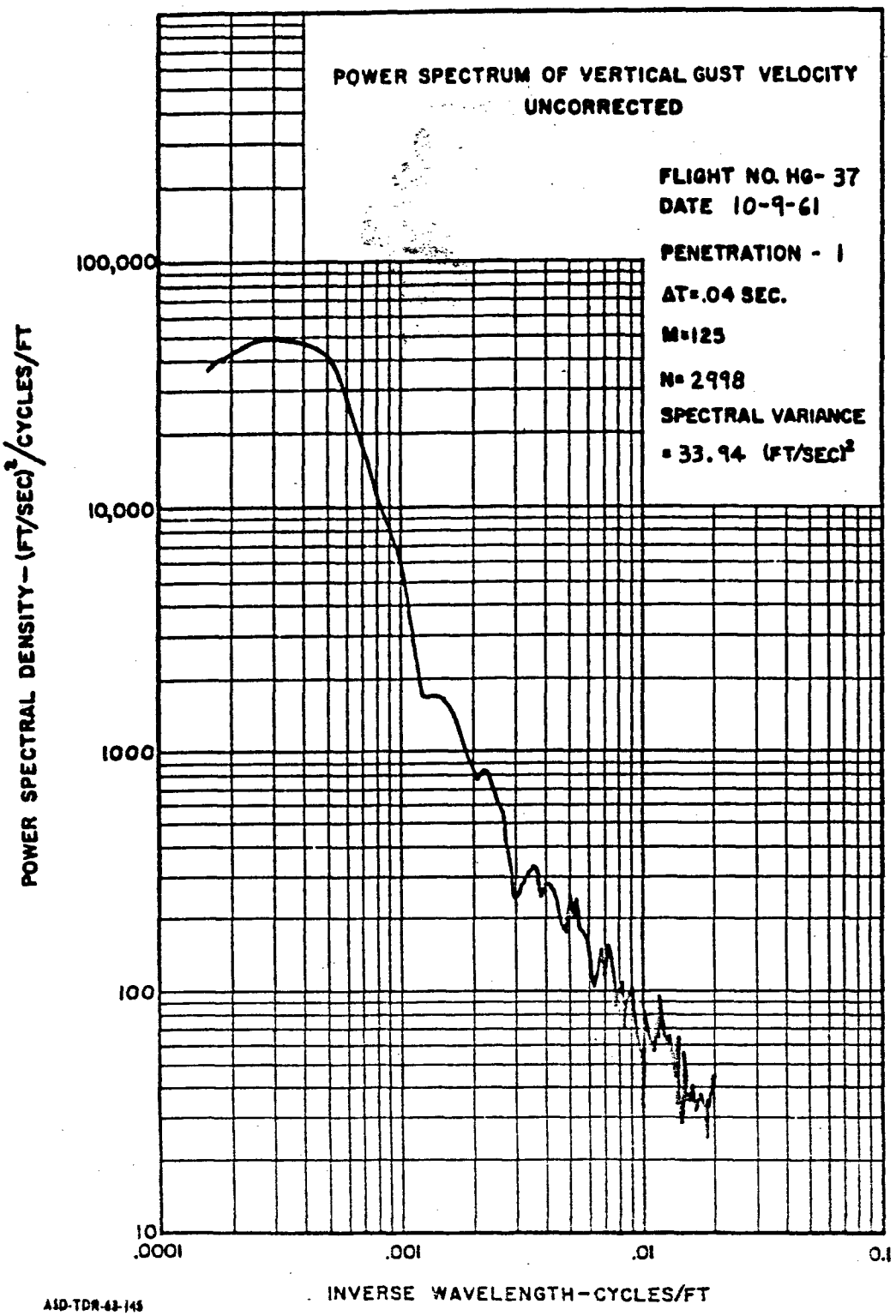

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 3730
SPECTRAL VARIANCE
= 24.46 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

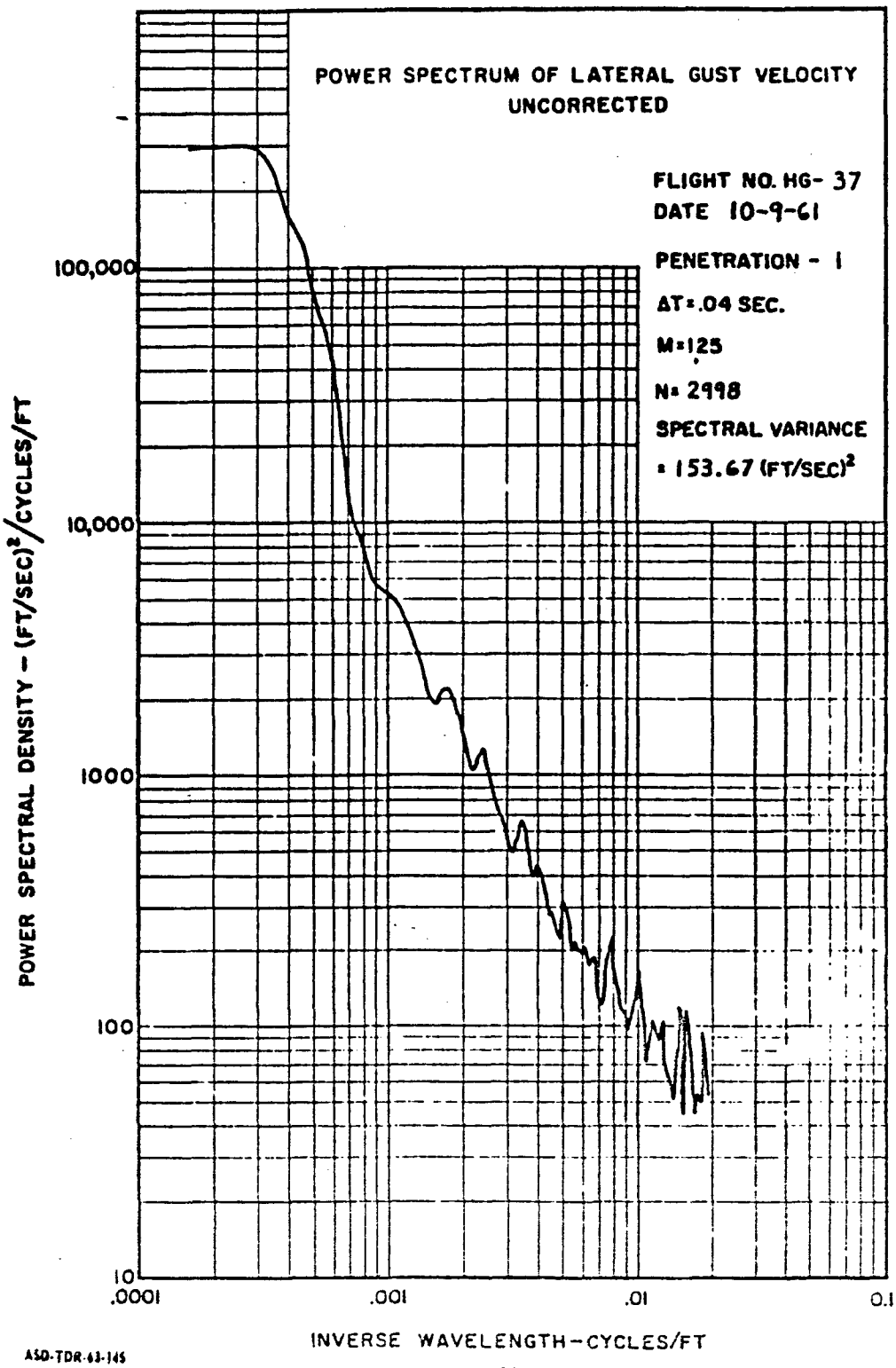

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 35
DATE 10-7-61
PENETRATION - 11
ΔT=.04 SEC.
M=125
N= 3730
SPECTRAL VARIANCE
= 172.75 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

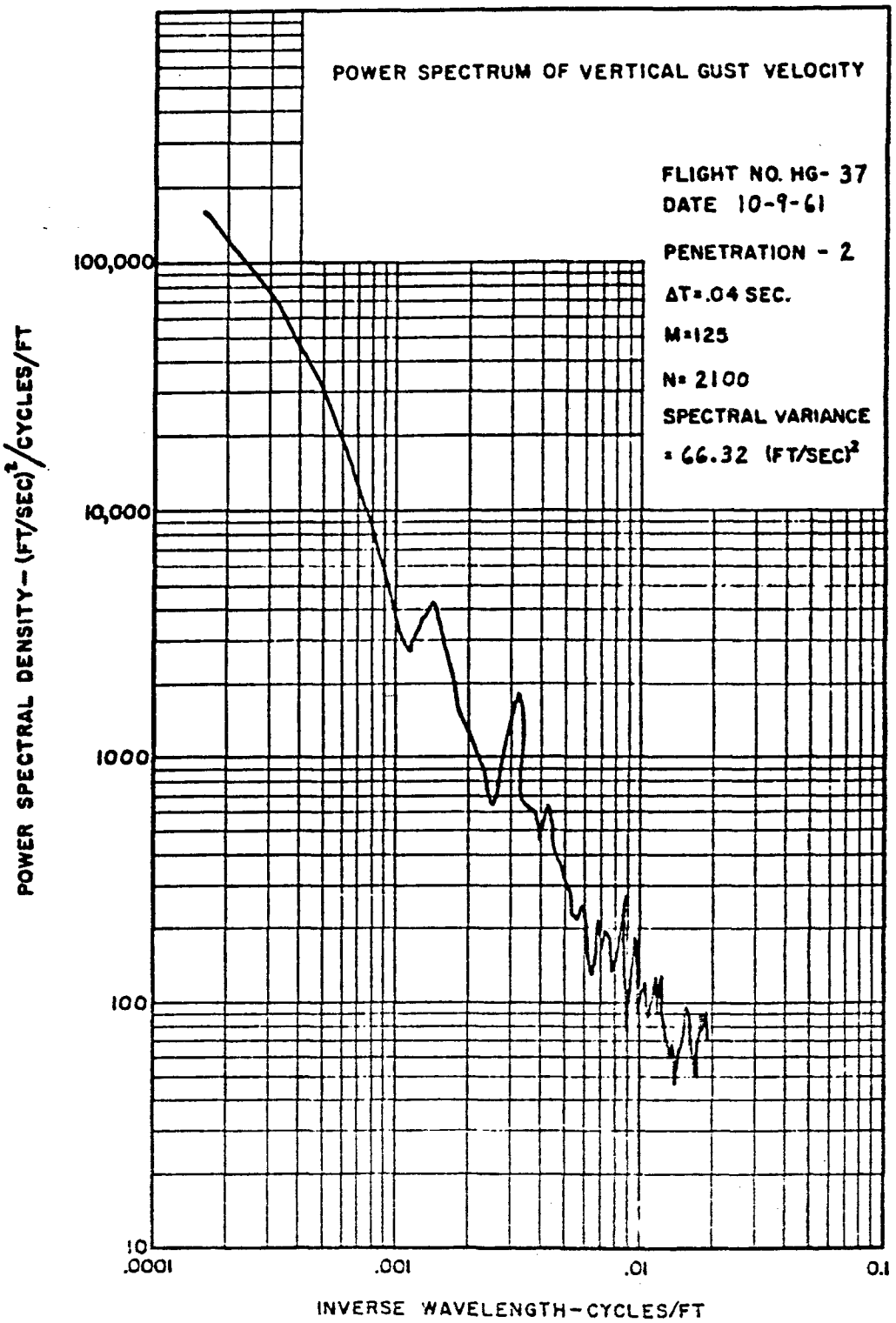

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2998
SPECTRAL VARIANCE
= 25.16 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

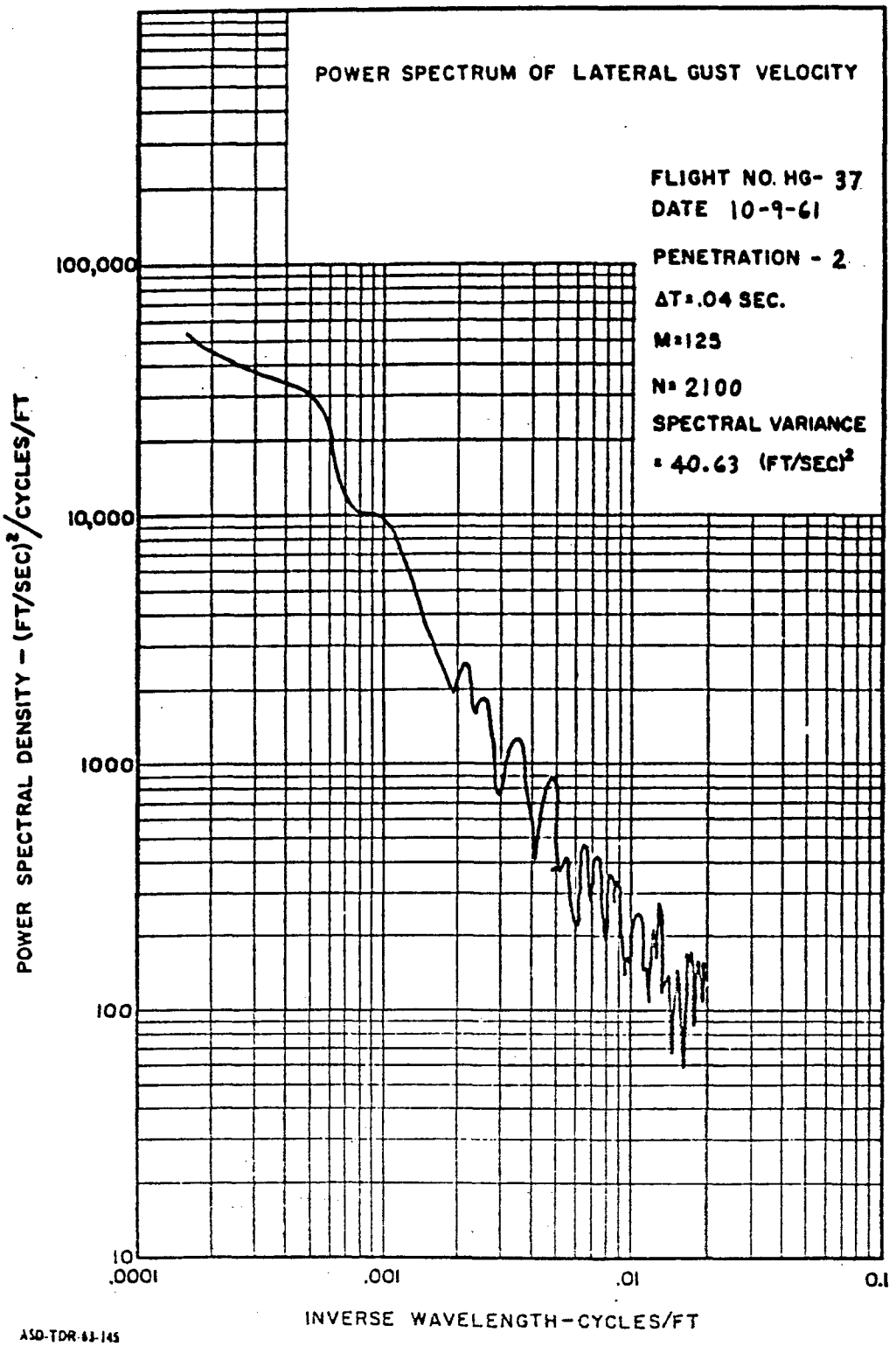

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N=2998
SPECTRAL VARIANCE
=39.38 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

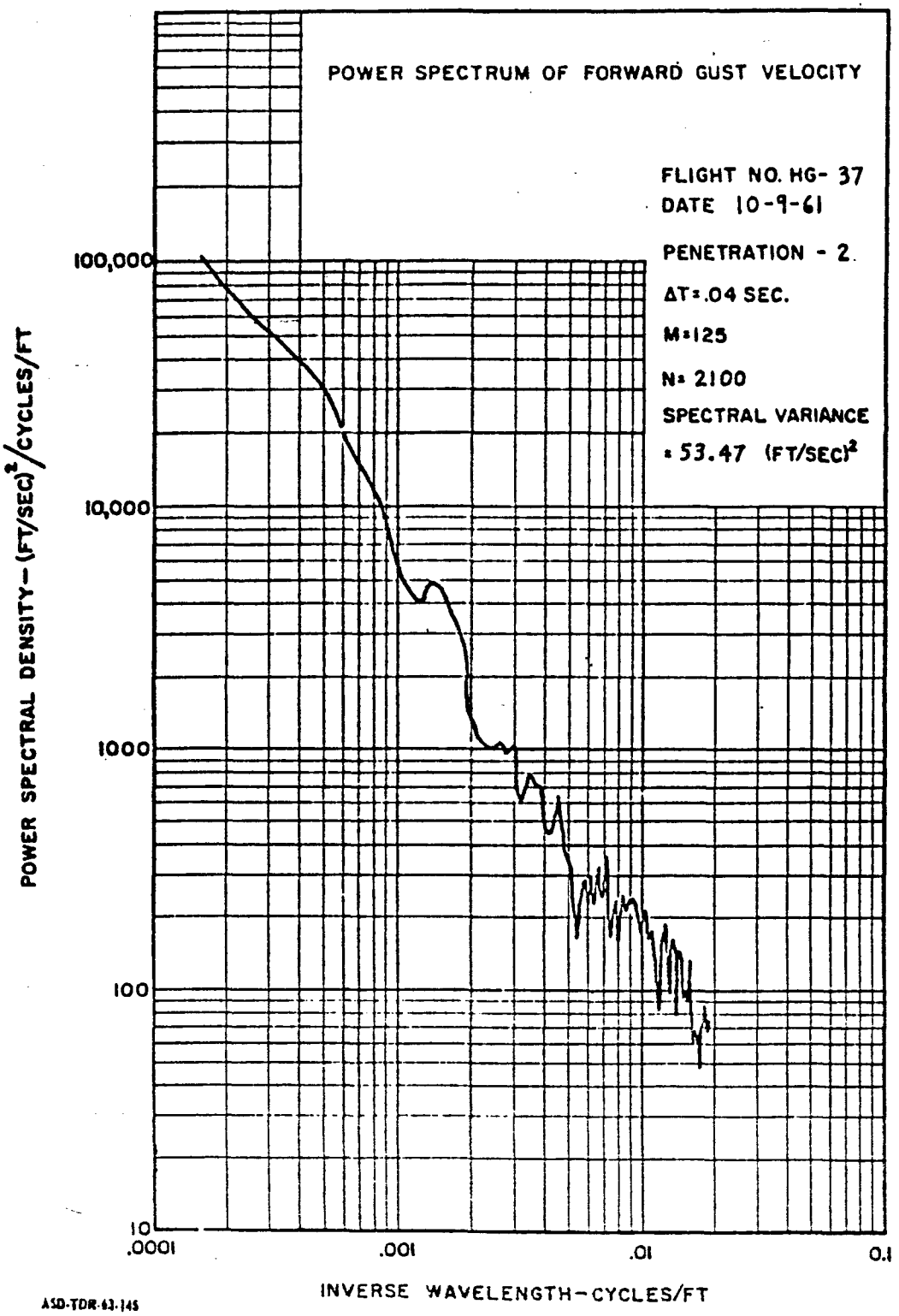

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2998
SPECTRAL VARIANCE
= 21.42 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

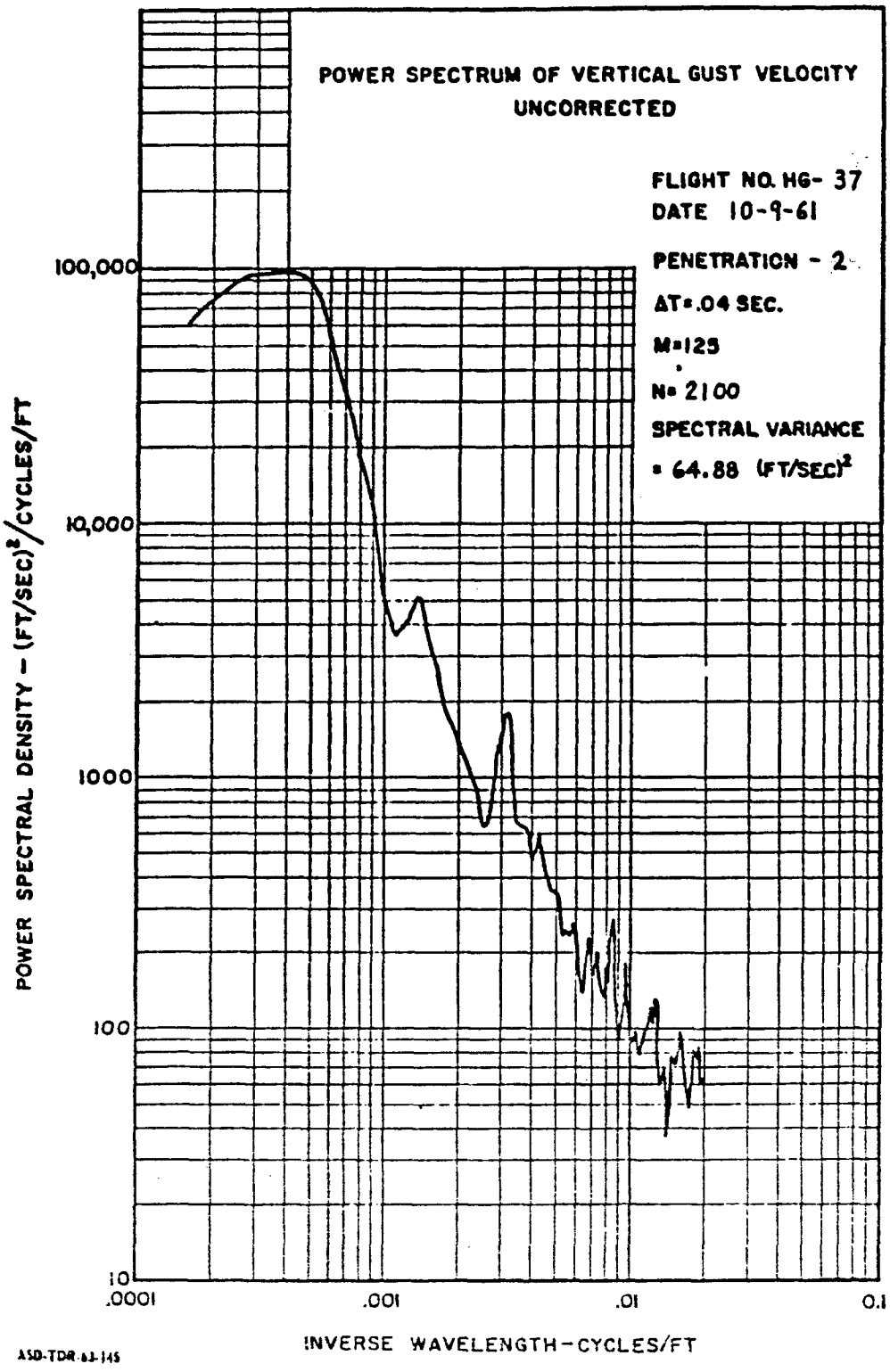

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2998
SPECTRAL VARIANCE
= 33.94 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

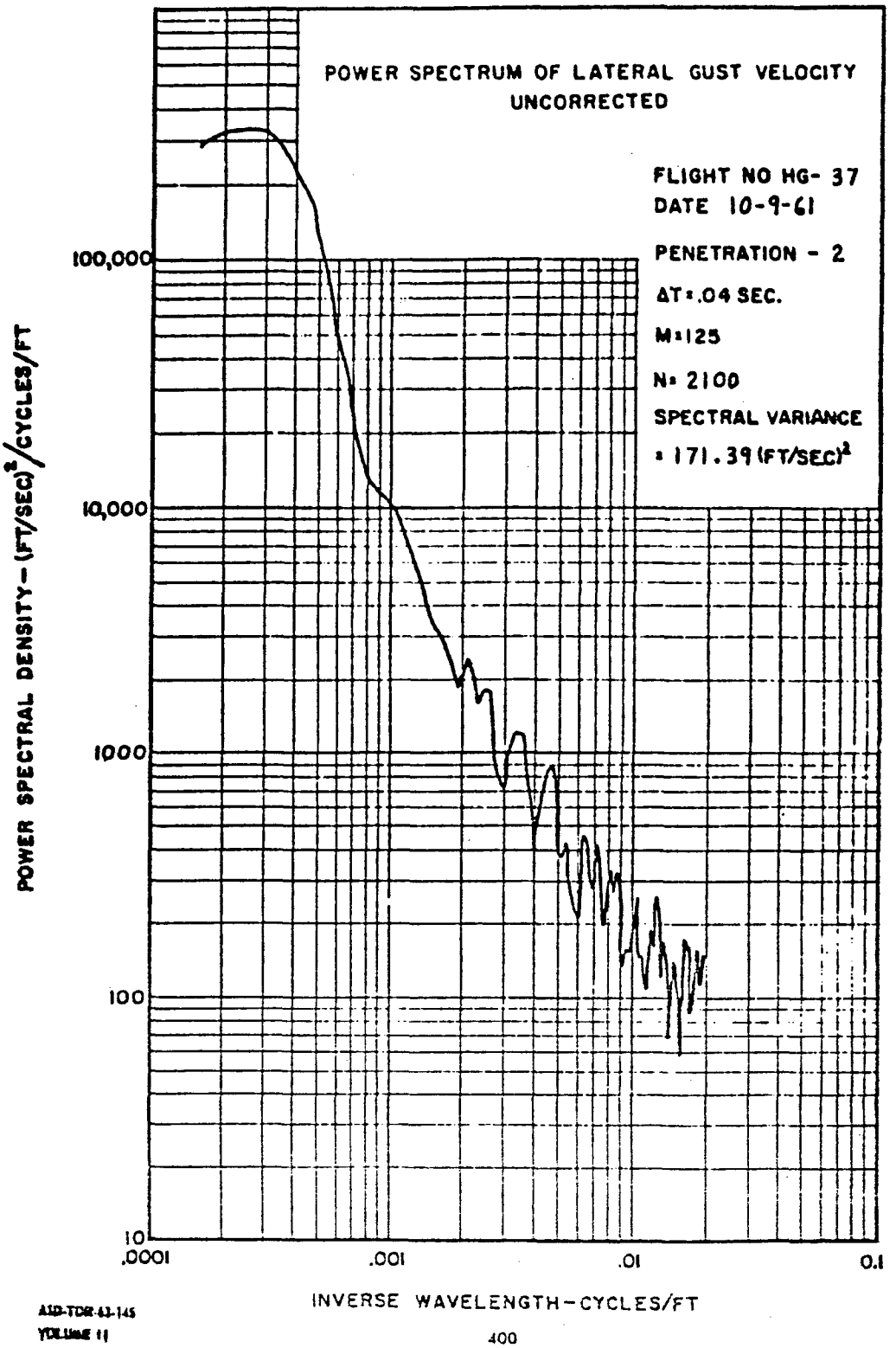

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 1
ΔT=.04 SEC.
M=125
N= 2998
SPECTRAL VARIANCE
= 153.67 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

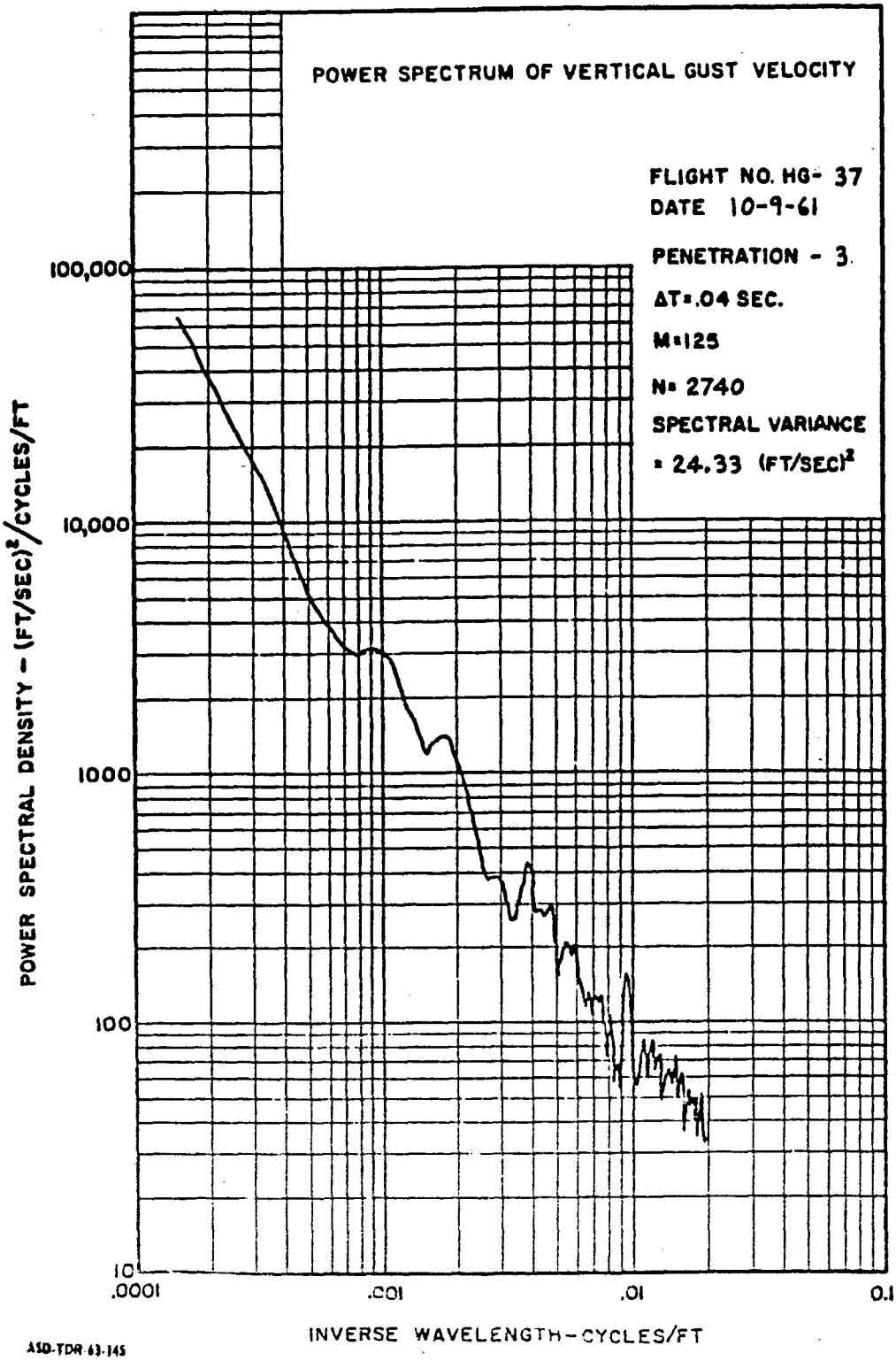

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2100
SPECTRAL VARIANCE
= 66.32 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

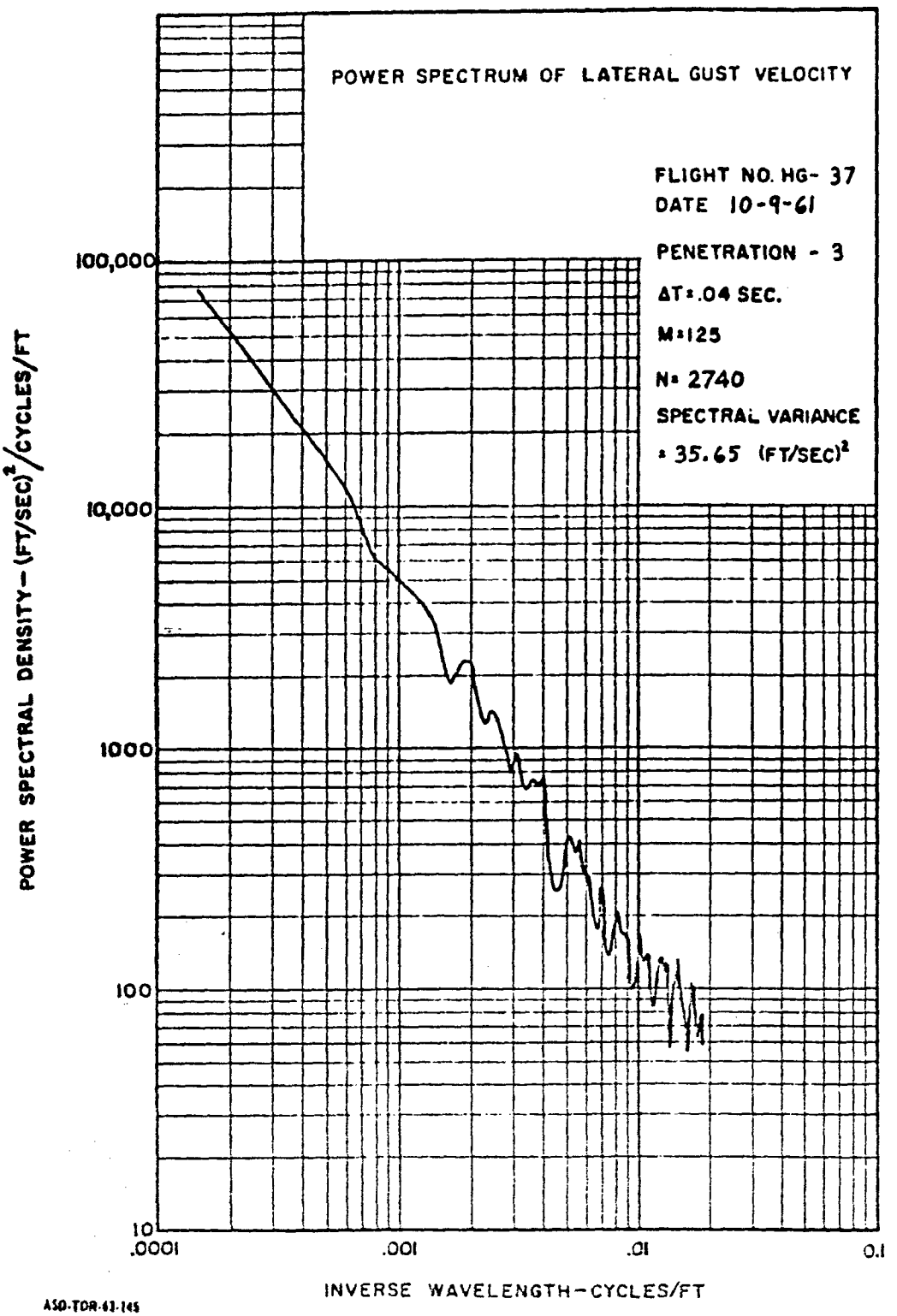

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2100
SPECTRAL VARIANCE
= 40.63 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

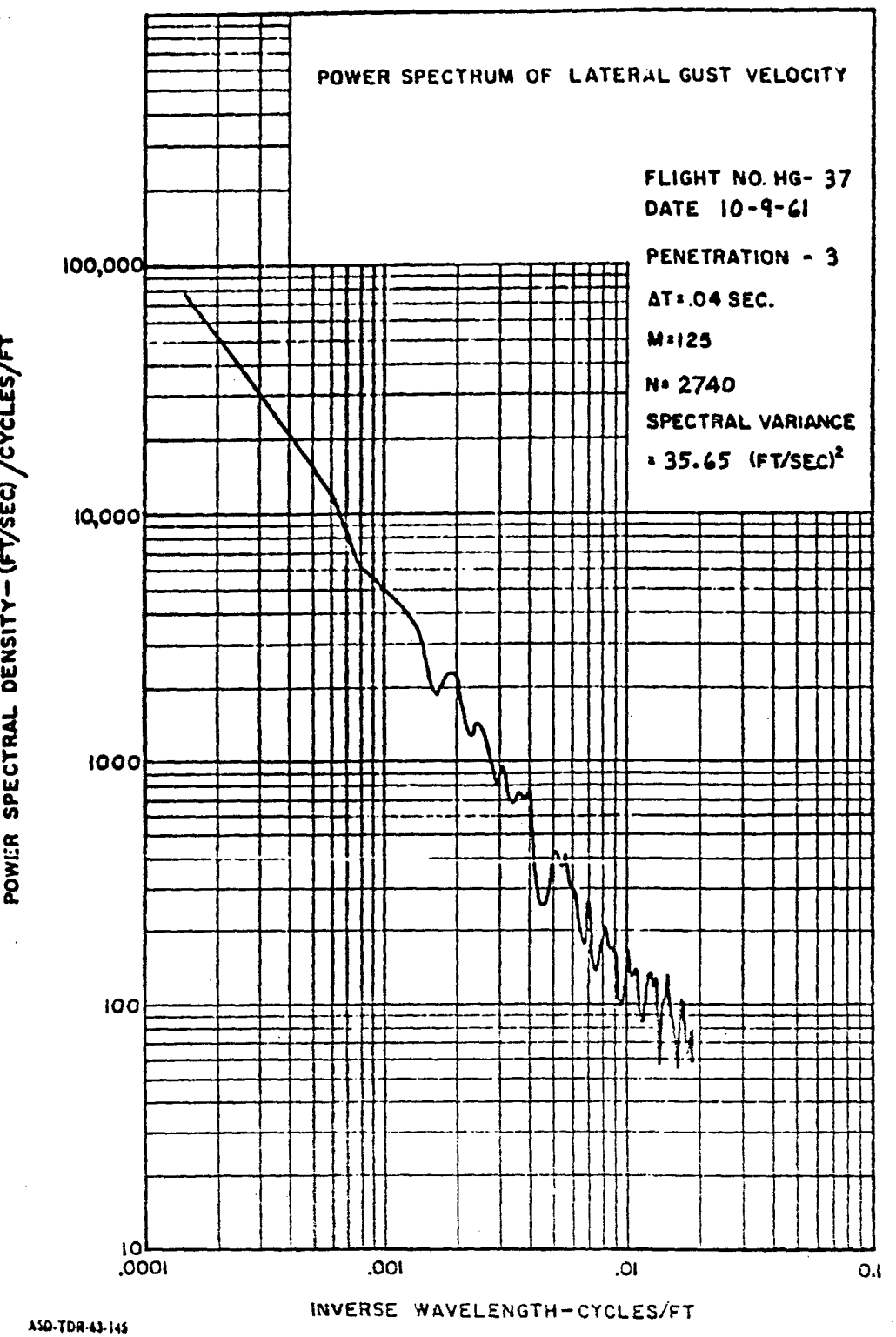

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 2.
ΔT=.04 SEC.
M=125
N= 2100
SPECTRAL VARIANCE
= 53.47 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

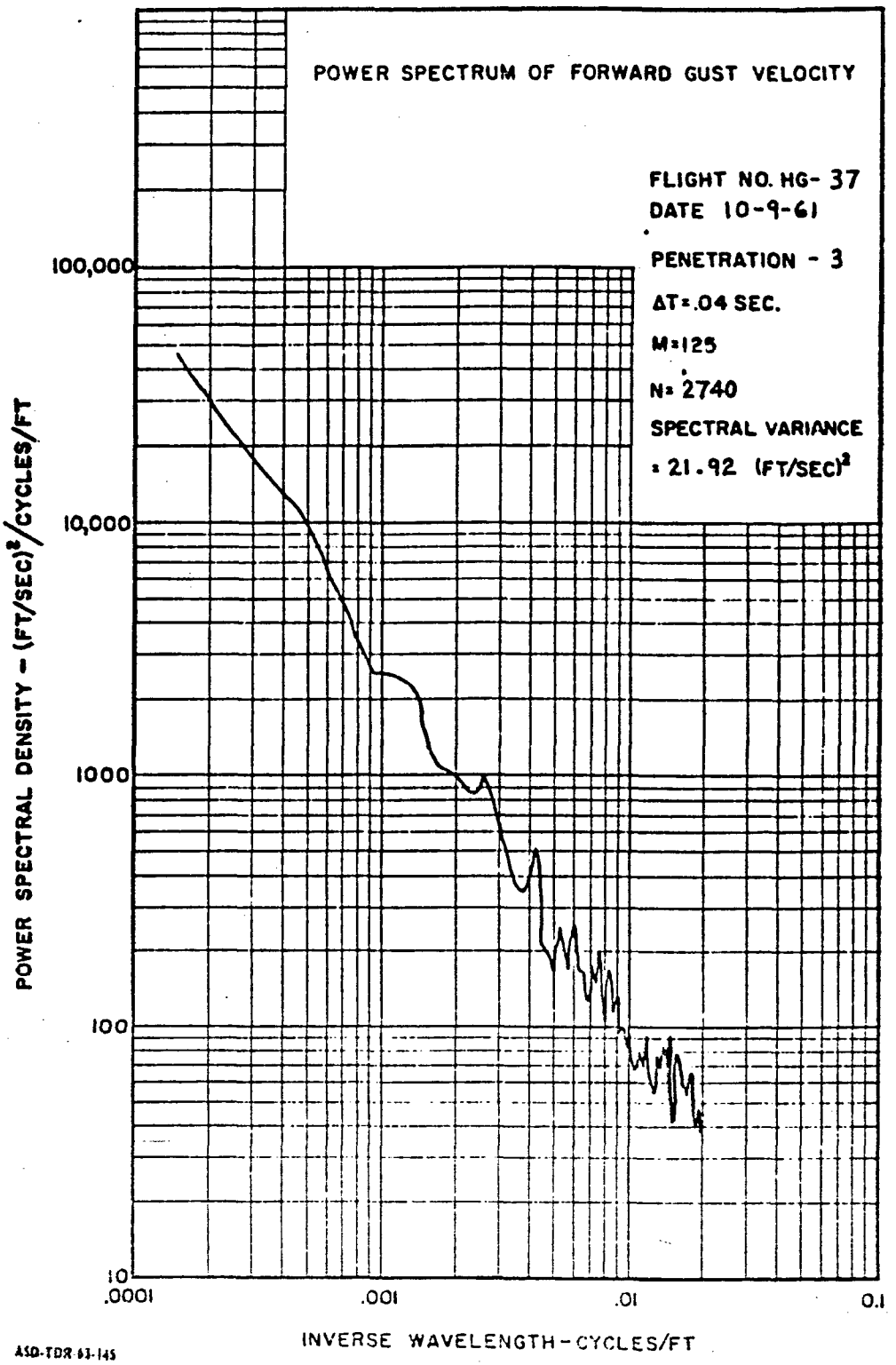

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2100
SPECTRAL VARIANCE
= 64.88 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

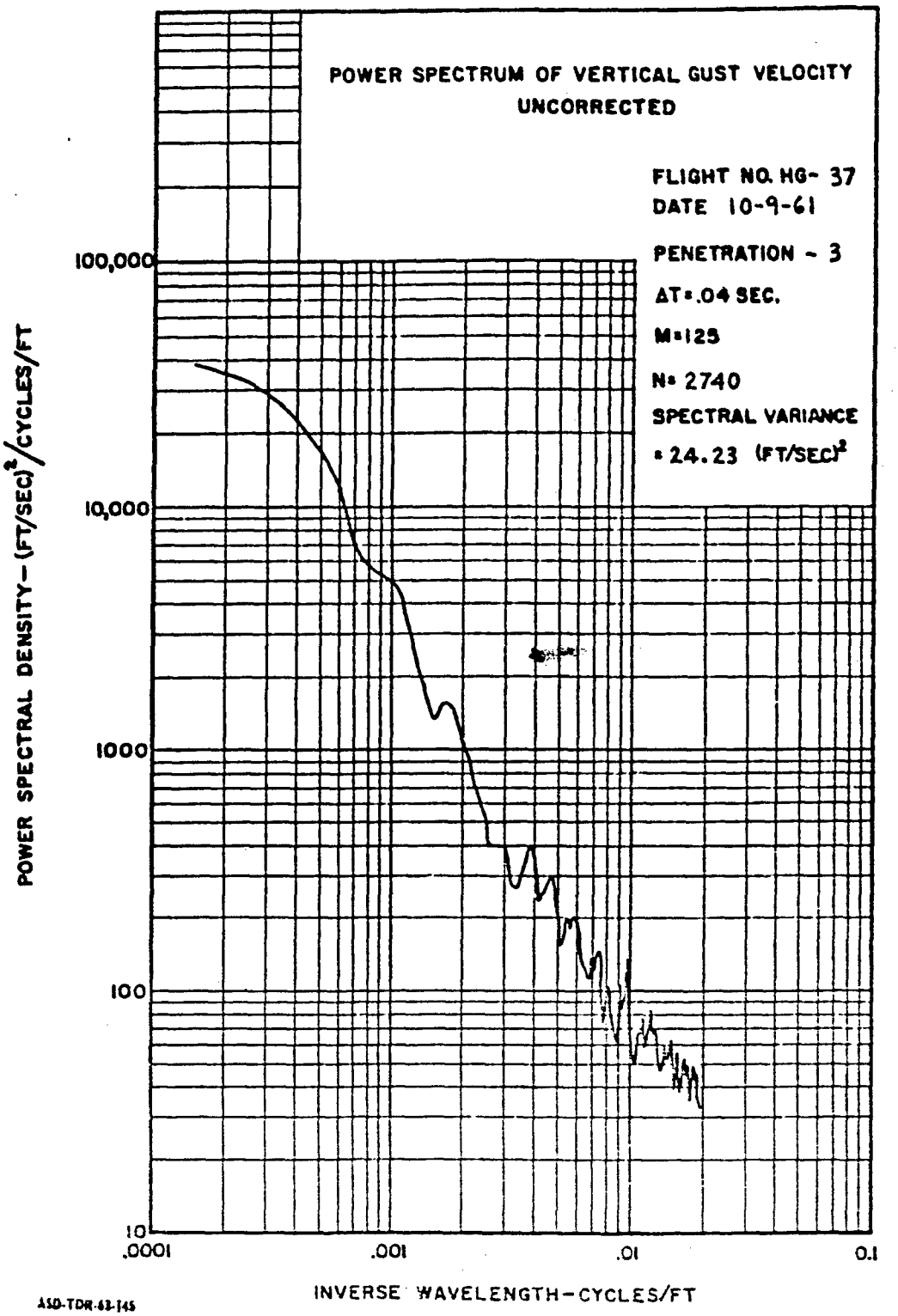

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO HG- 37
DATE 10-9-61
PENETRATION - 2
ΔT=.04 SEC.
M=125
N= 2100
SPECTRAL VARIANCE
= 171.39 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

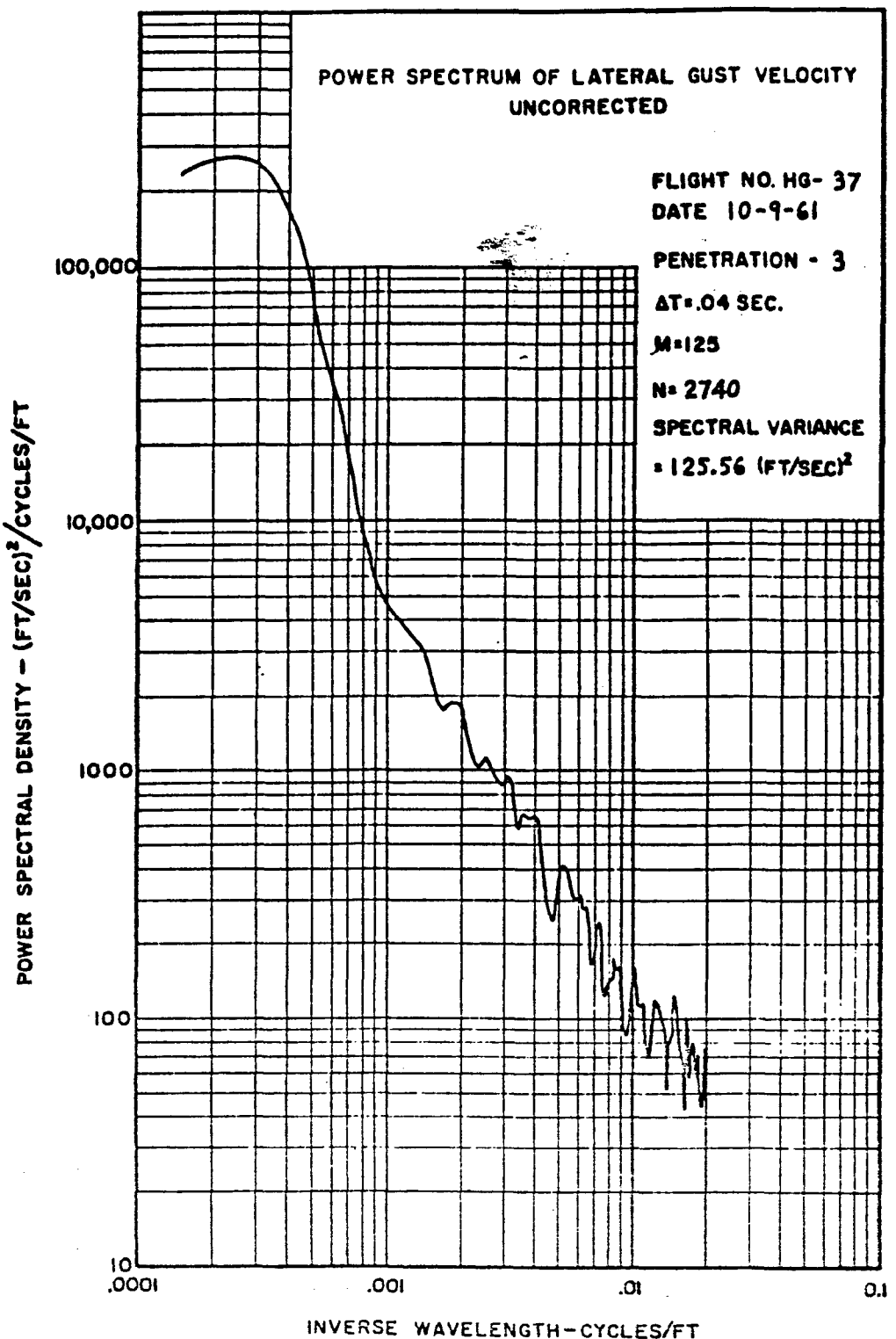

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 3.
ΔT=.04 SEC.
M=125
N= 2740
SPECTRAL VARIANCE
= 24.33 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

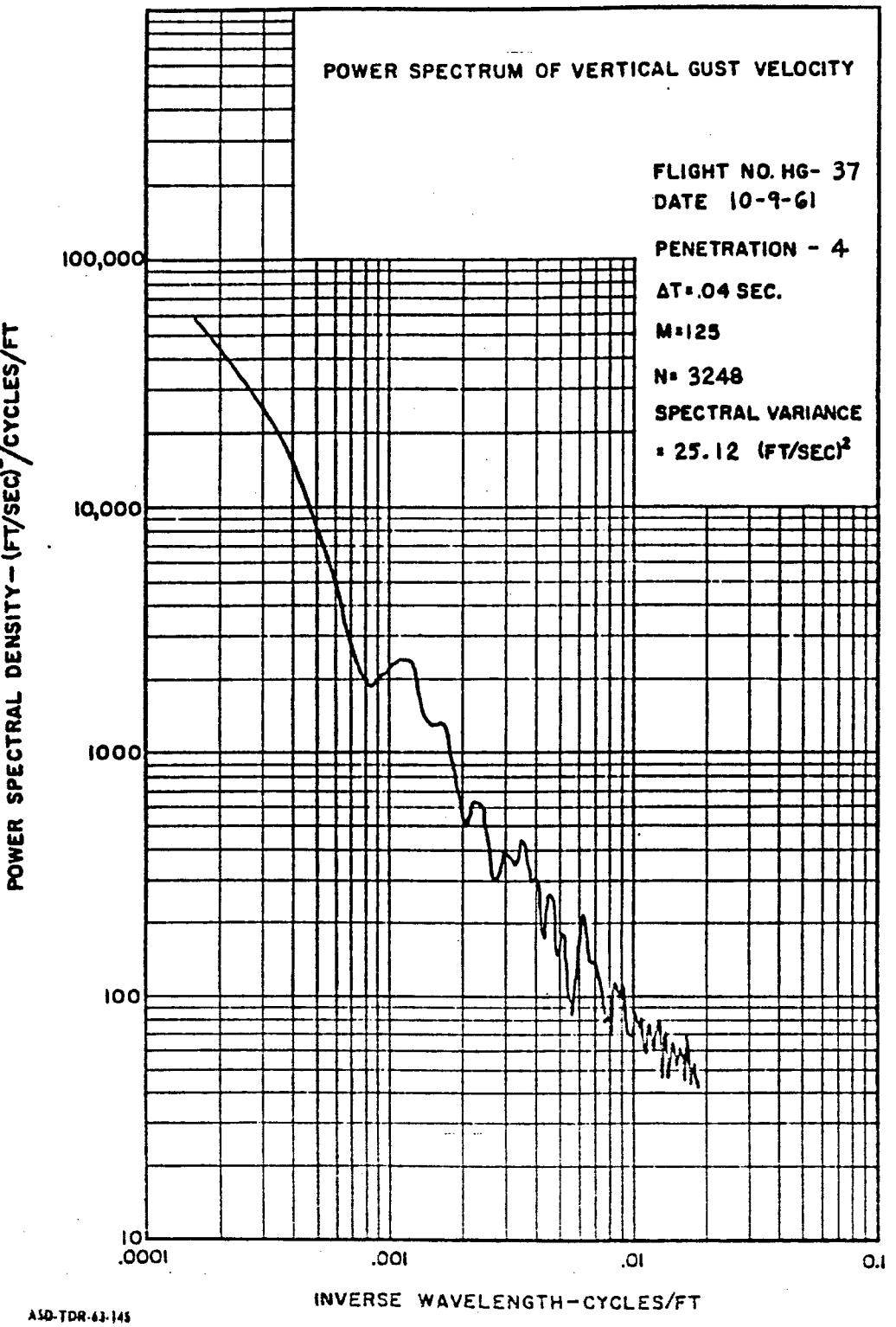

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 2740
SPECTRAL VARIANCE
= 35.65 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

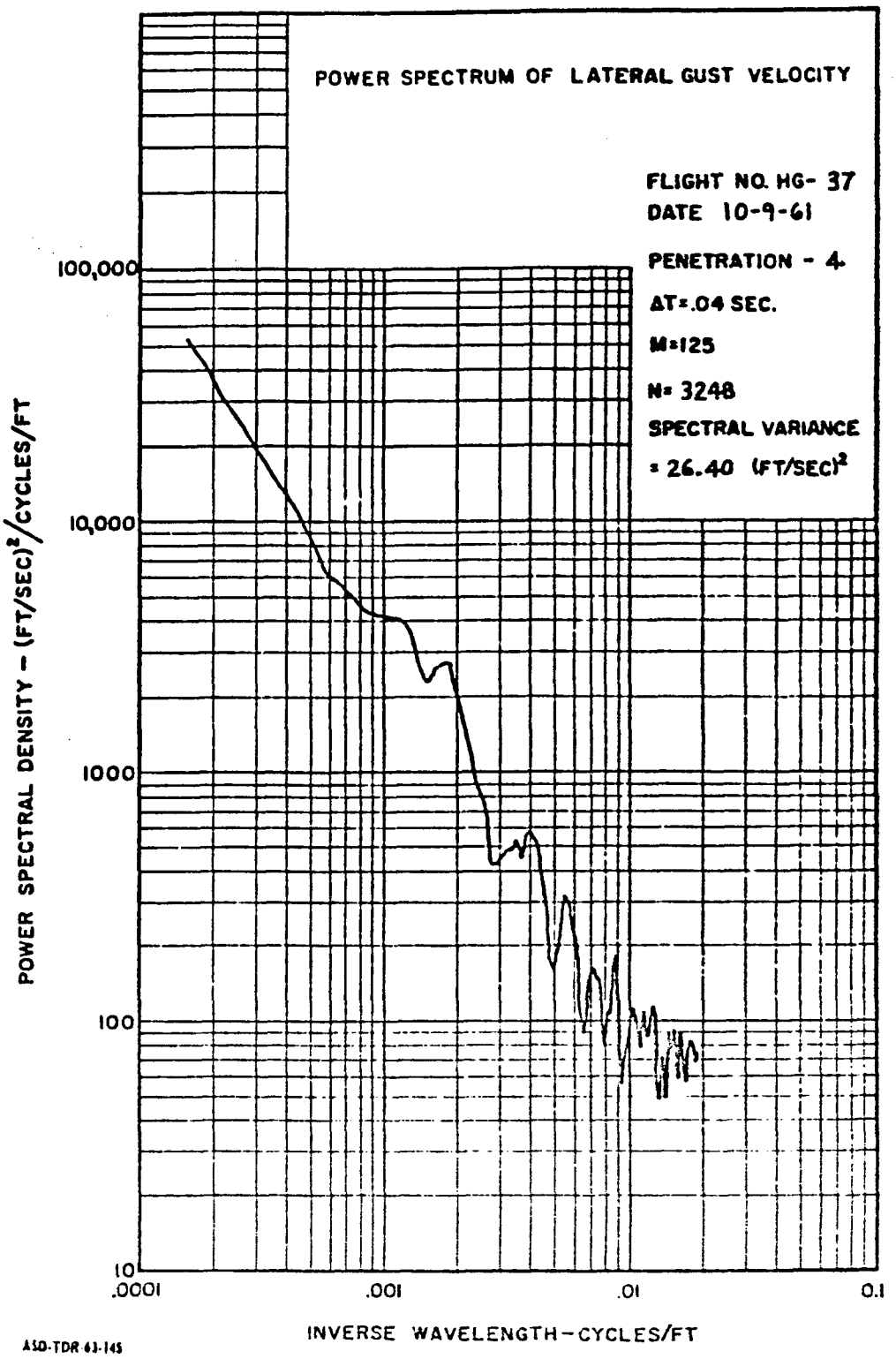

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 2740
SPECTRAL VARIANCE
= 35.65 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

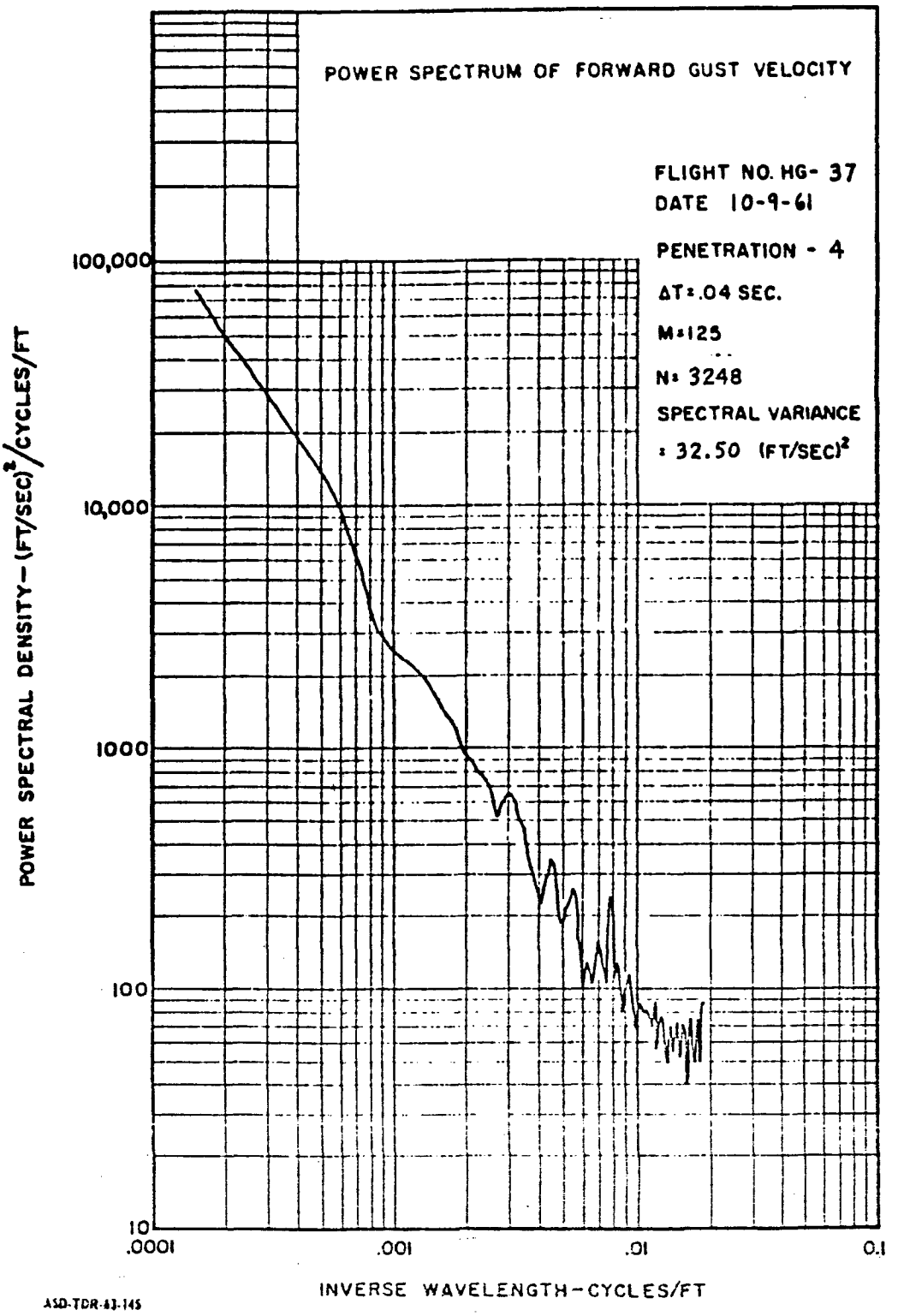

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 2740
SPECTRAL VARIANCE
= 21.92 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

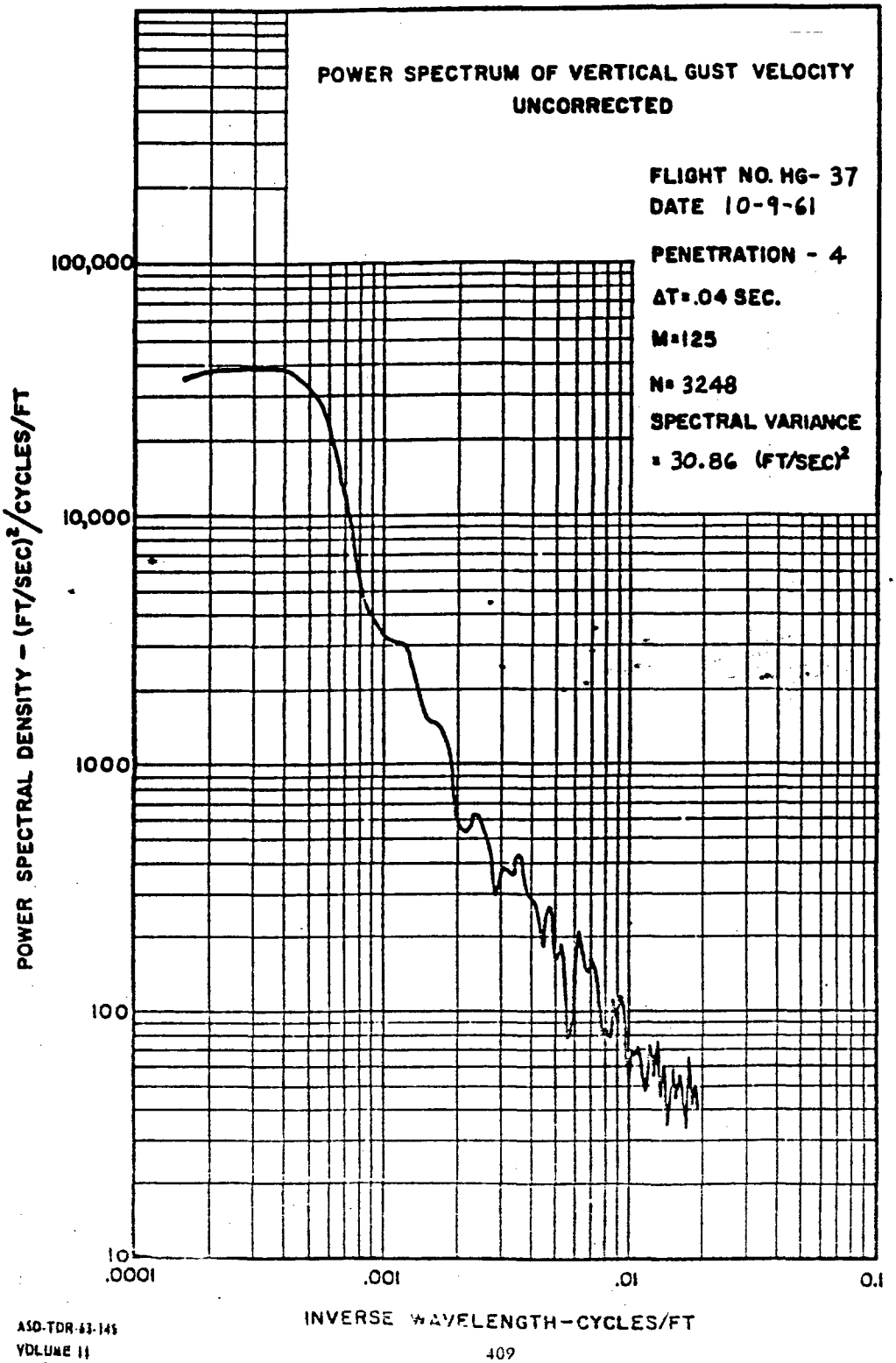

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 2740
SPECTRAL VARIANCE
= 24.23 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

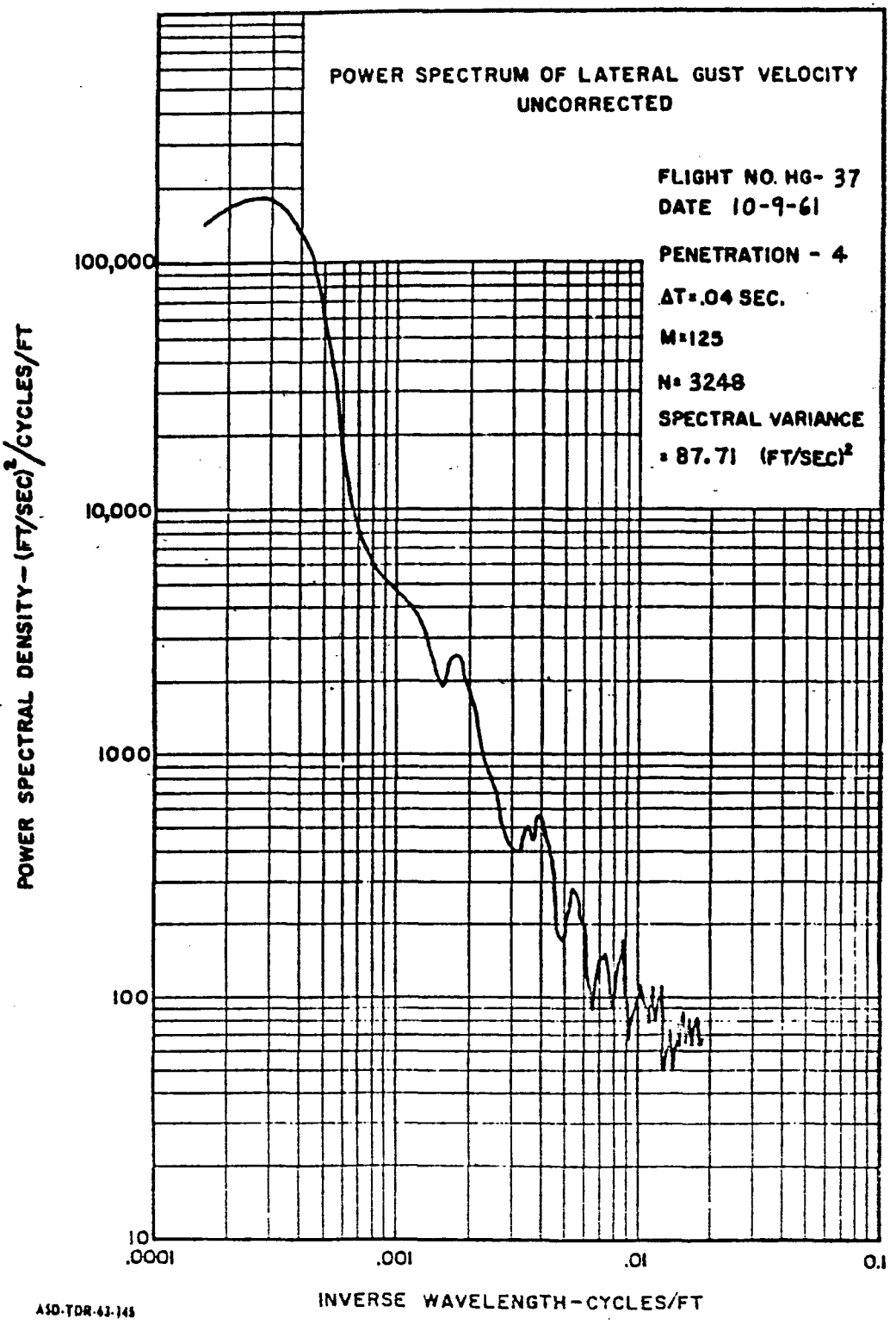

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 3
ΔT=.04 SEC.
M=125
N= 2740
SPECTRAL VARIANCE
= 125.56 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

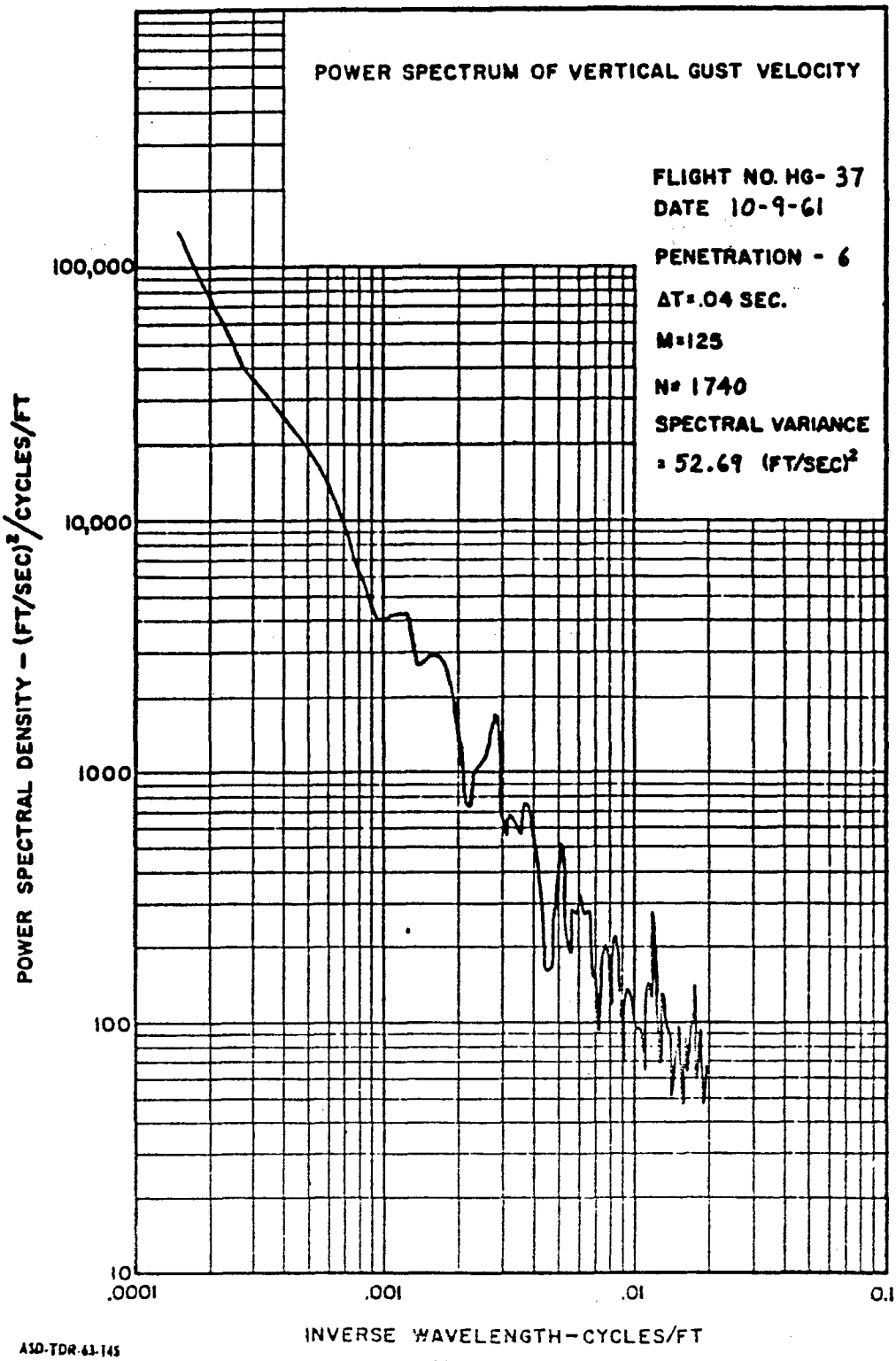

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 3248
SPECTRAL VARIANCE
= 25.12 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

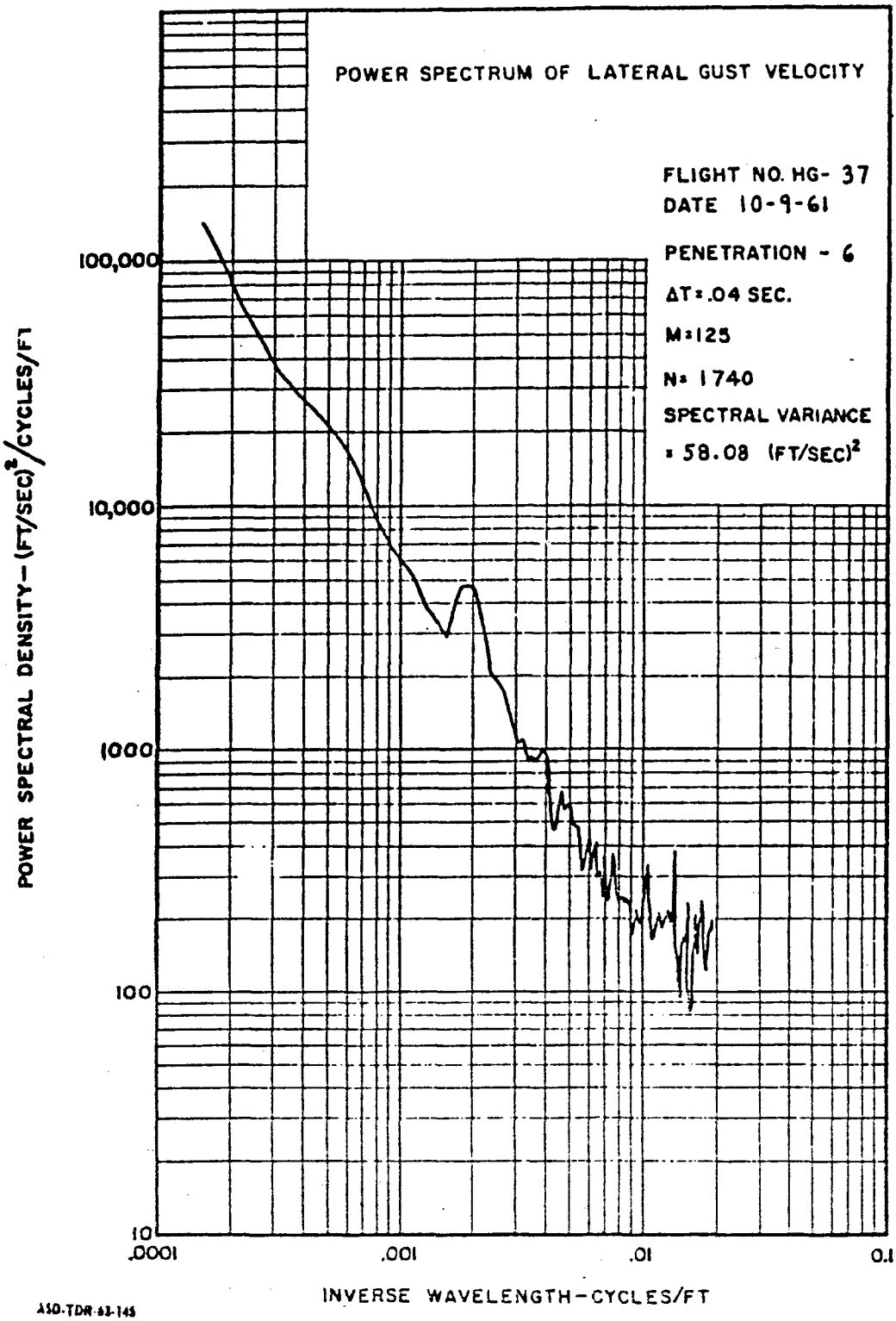

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 3248
SPECTRAL VARIANCE
= 26.40 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

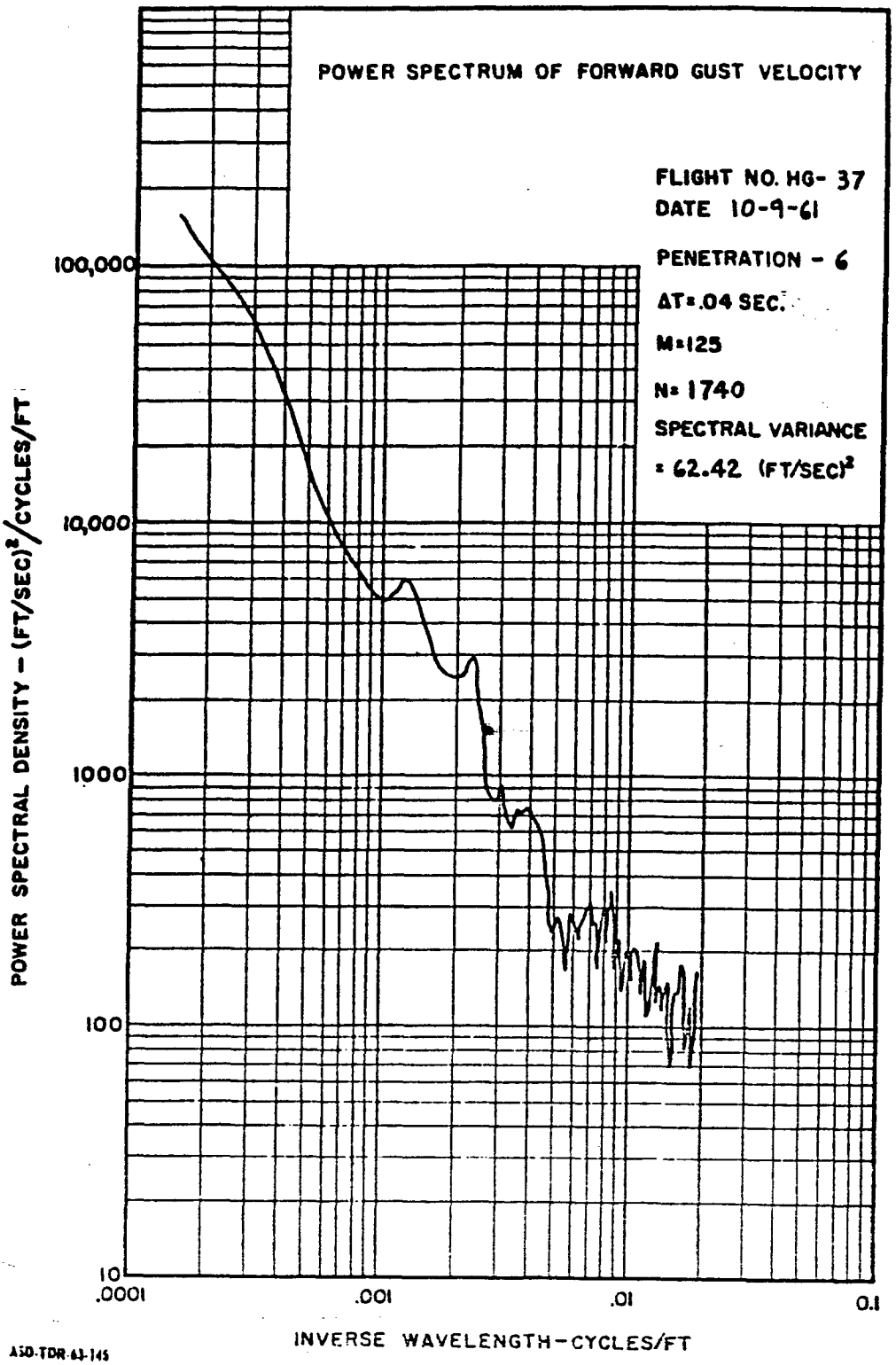

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 3248
SPECTRAL VARIANCE
= 32.50 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

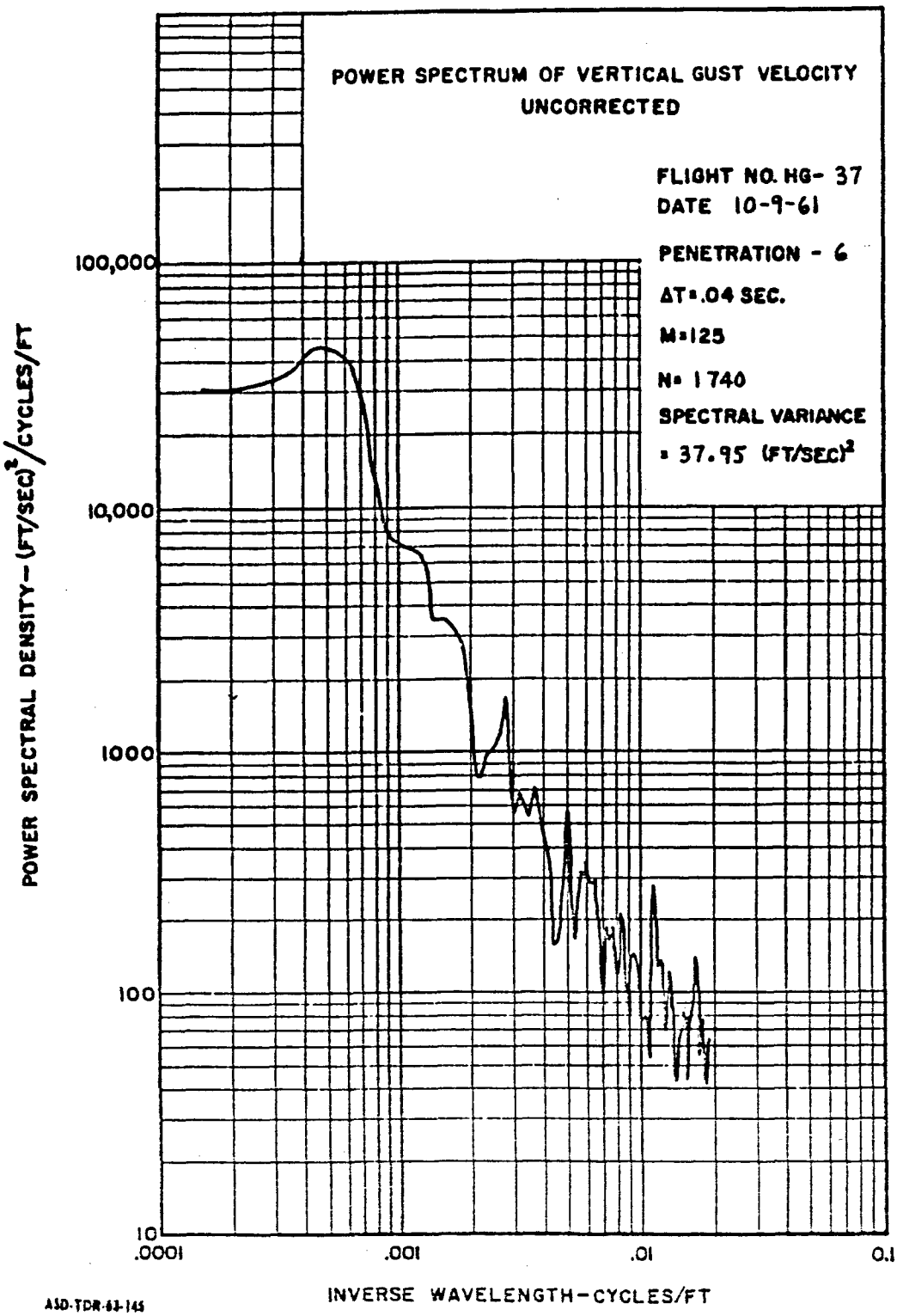

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 3248
SPECTRAL VARIANCE
= 30.86 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT


POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 4
ΔT=.04 SEC.
M=125
N= 3248
SPECTRAL VARIANCE
= 87.71 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT


POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 1740
SPECTRAL VARIANCE
= 52.69 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT


POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 1740
SPECTRAL VARIANCE
= 58.08 (FT/SEC)²
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH – CYCLES/FT


POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 1740
SPECTRAL VARIANCE
= 62.42 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT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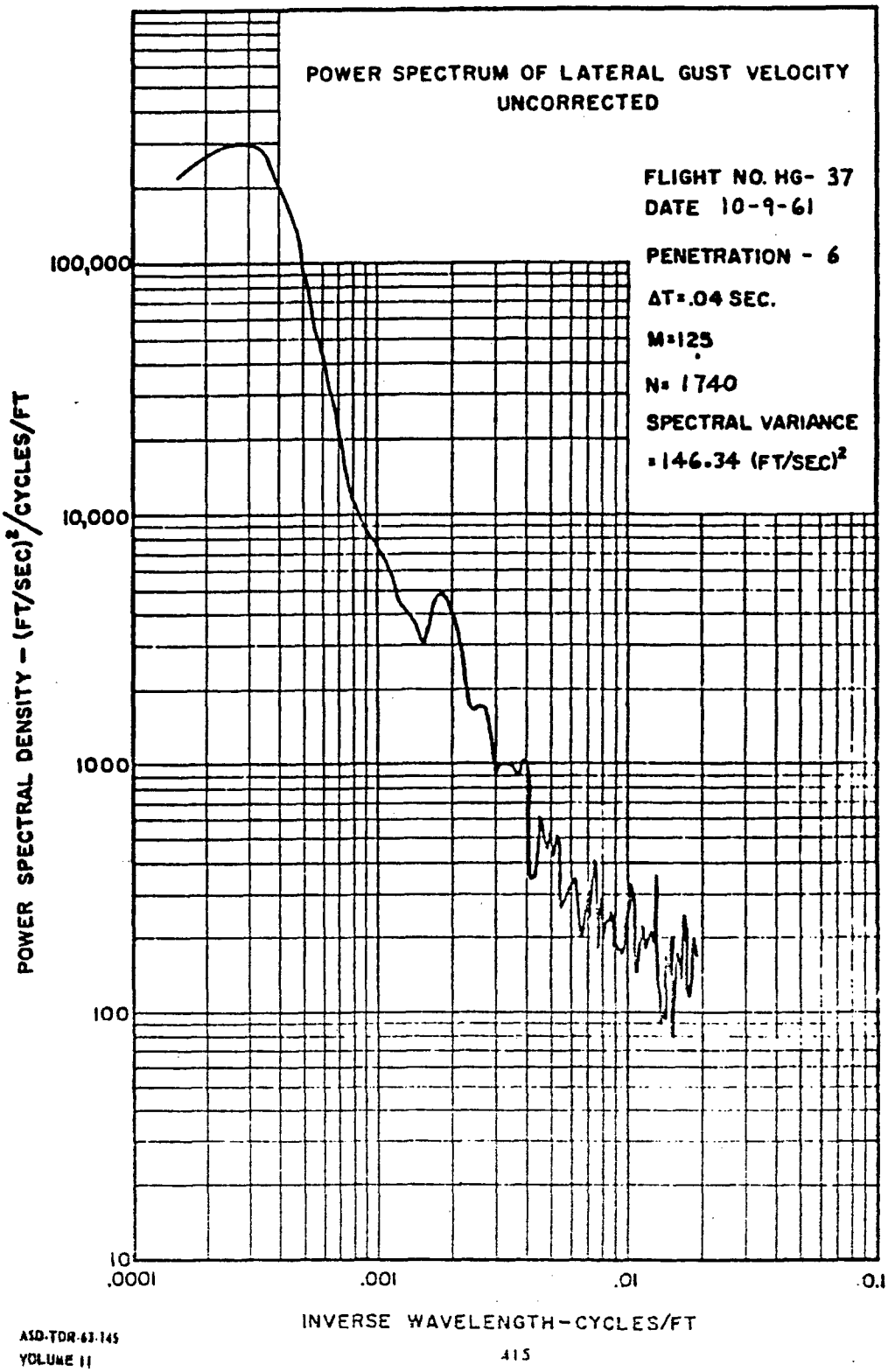
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 1740
SPECTRAL VARIANCE
= 37.95 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT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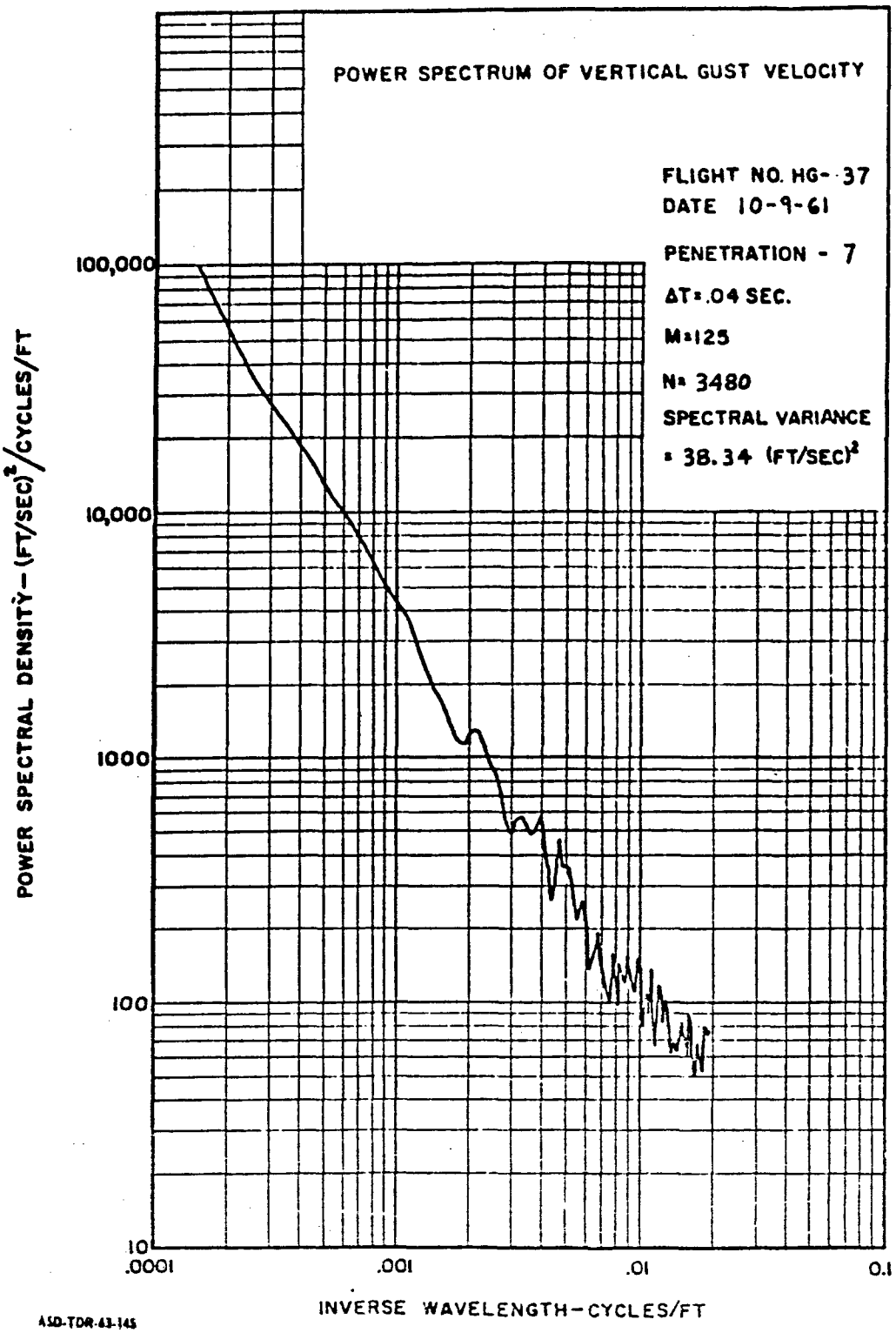
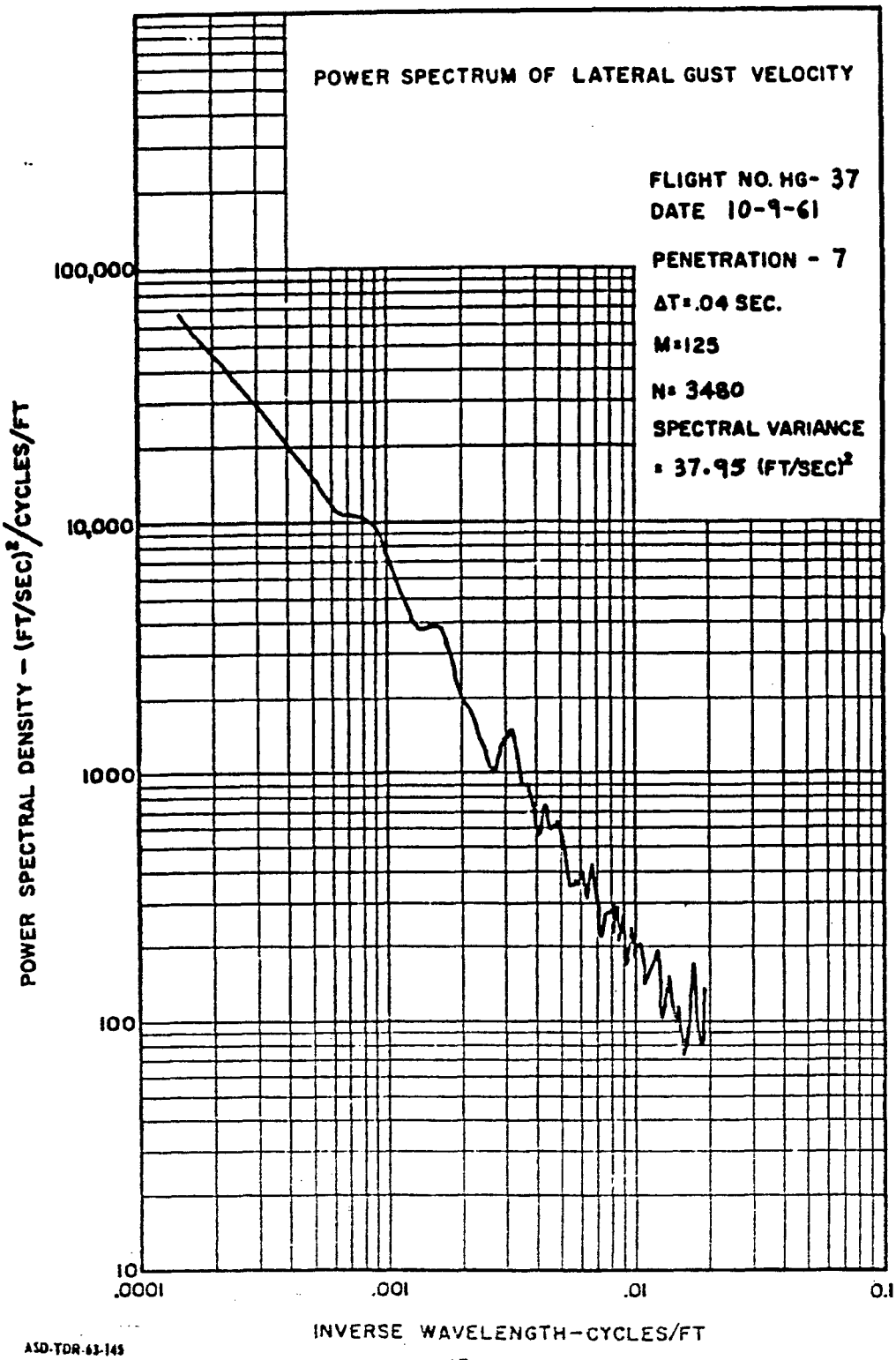
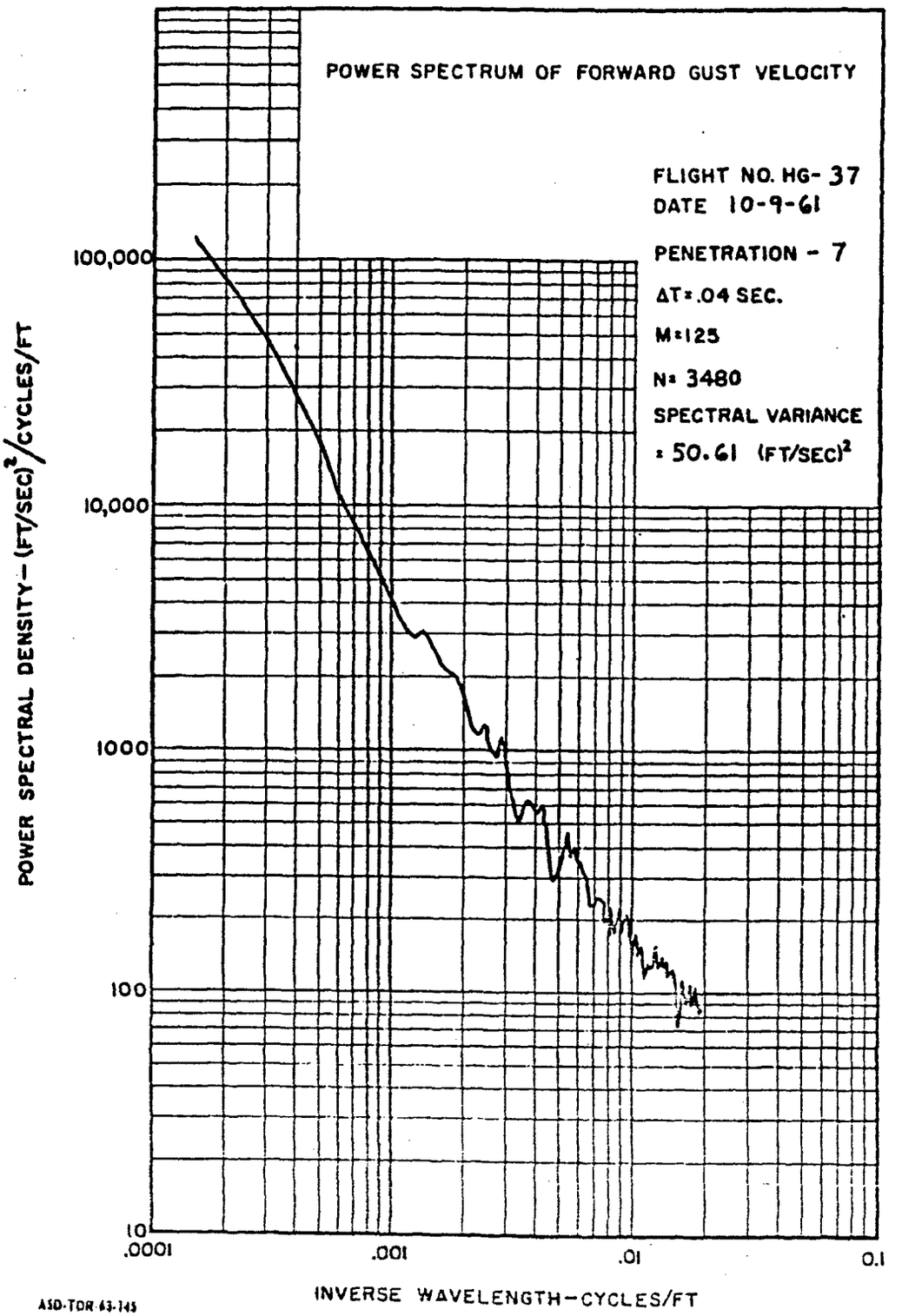
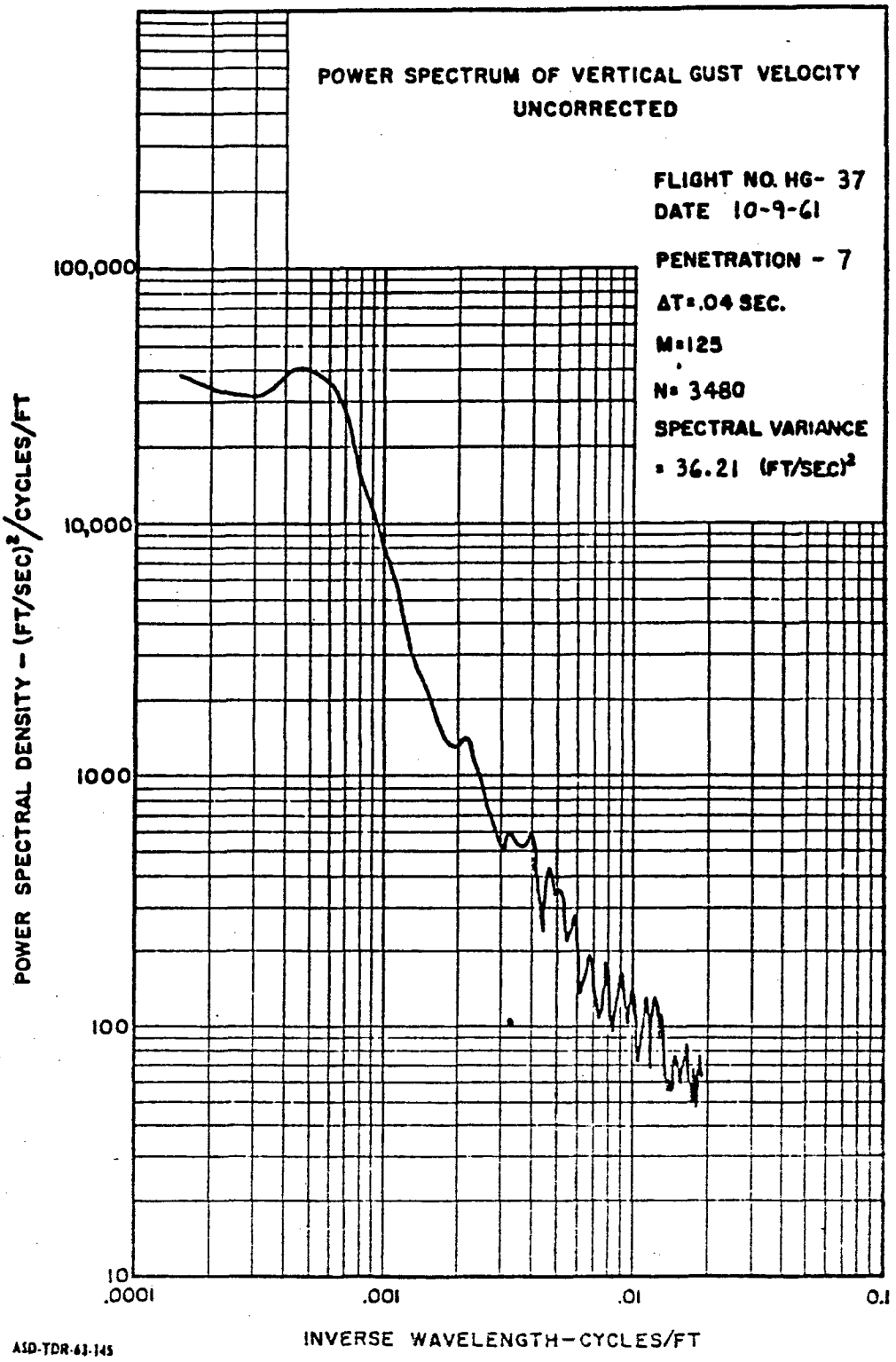
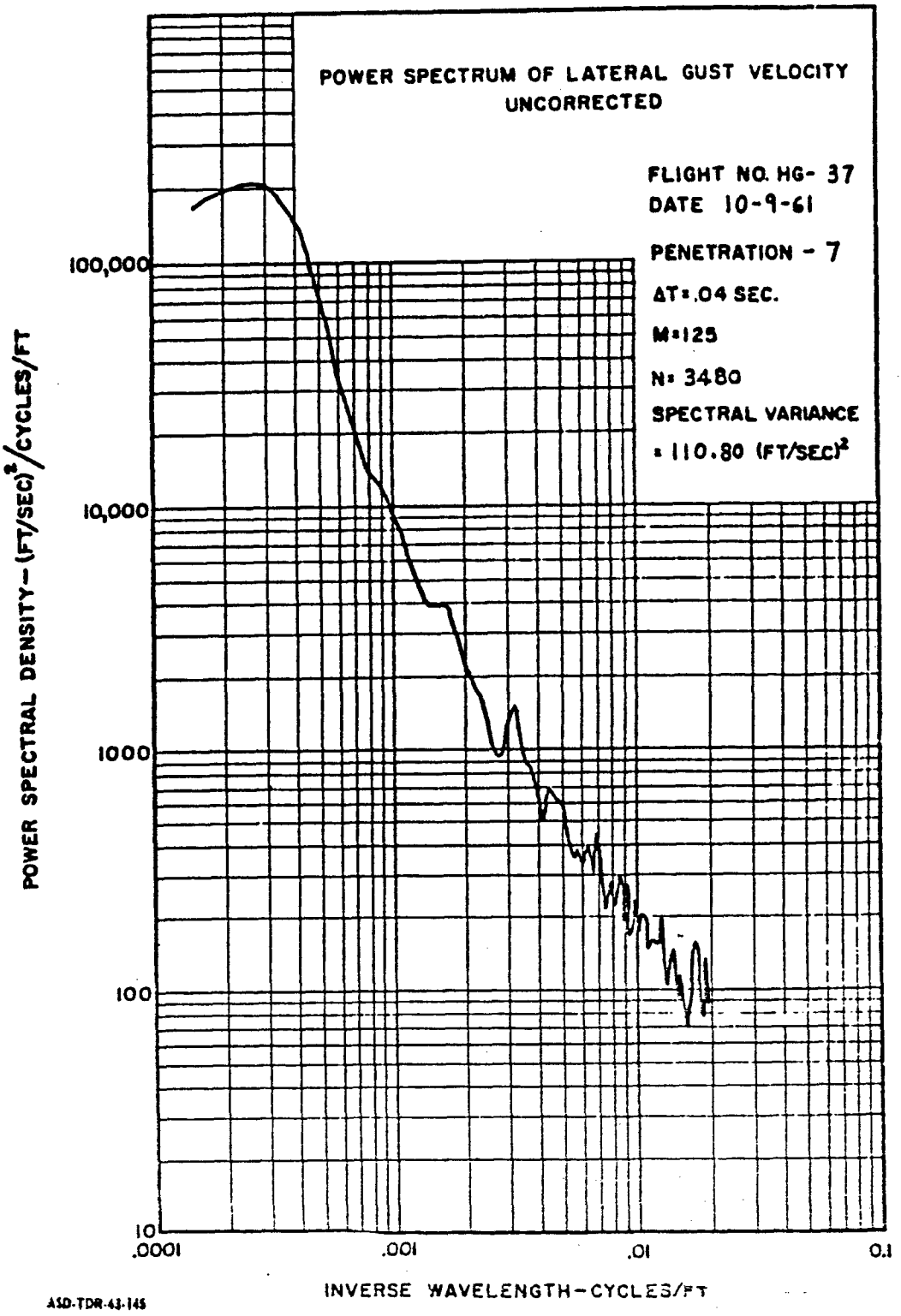
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 6
ΔT=.04 SEC.
M=125
N= 1740
SPECTRAL VARIANCE
=146.34 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

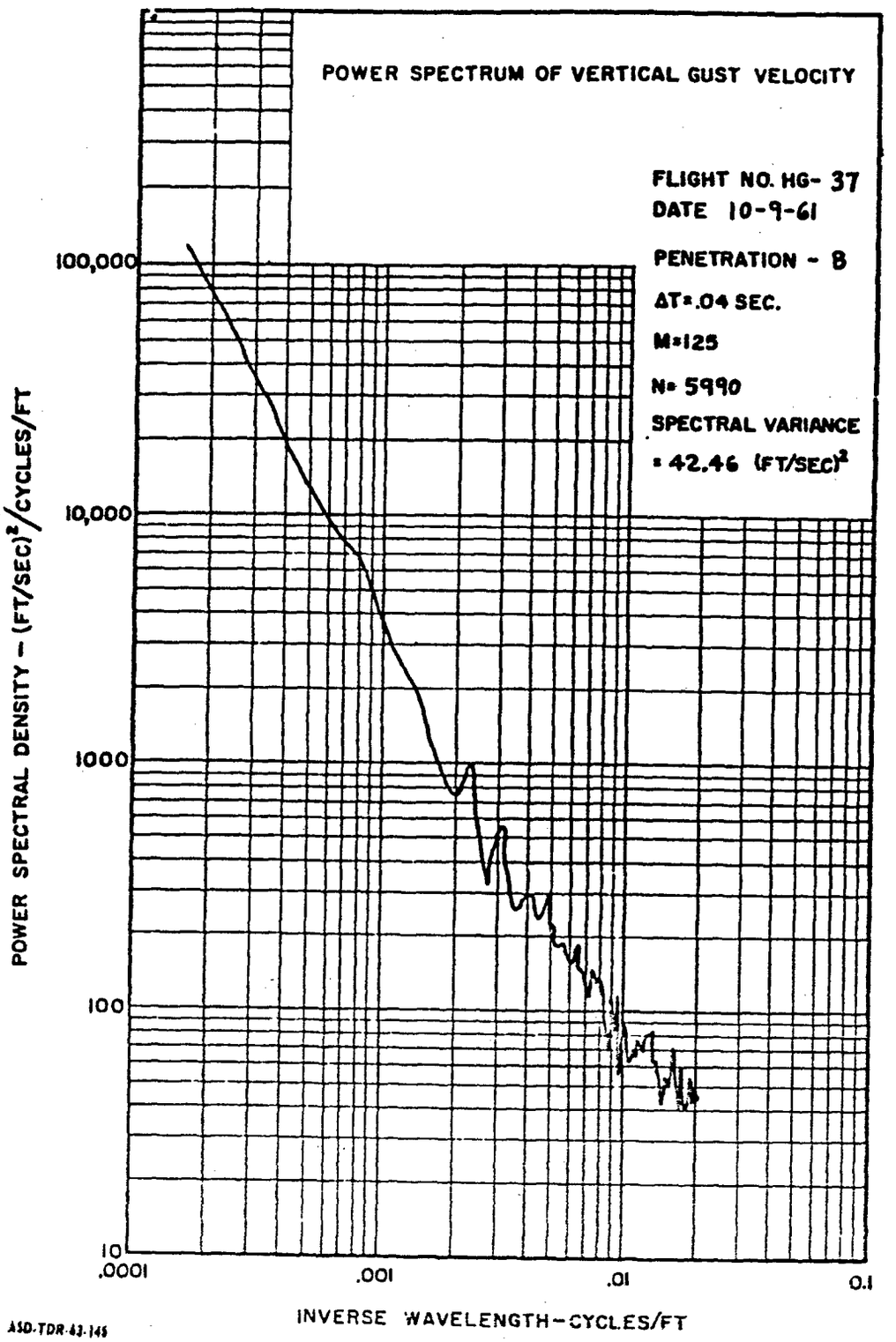

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG-37
DATE 10-9-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3480
SPECTRAL VARIANCE
= 38.34 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

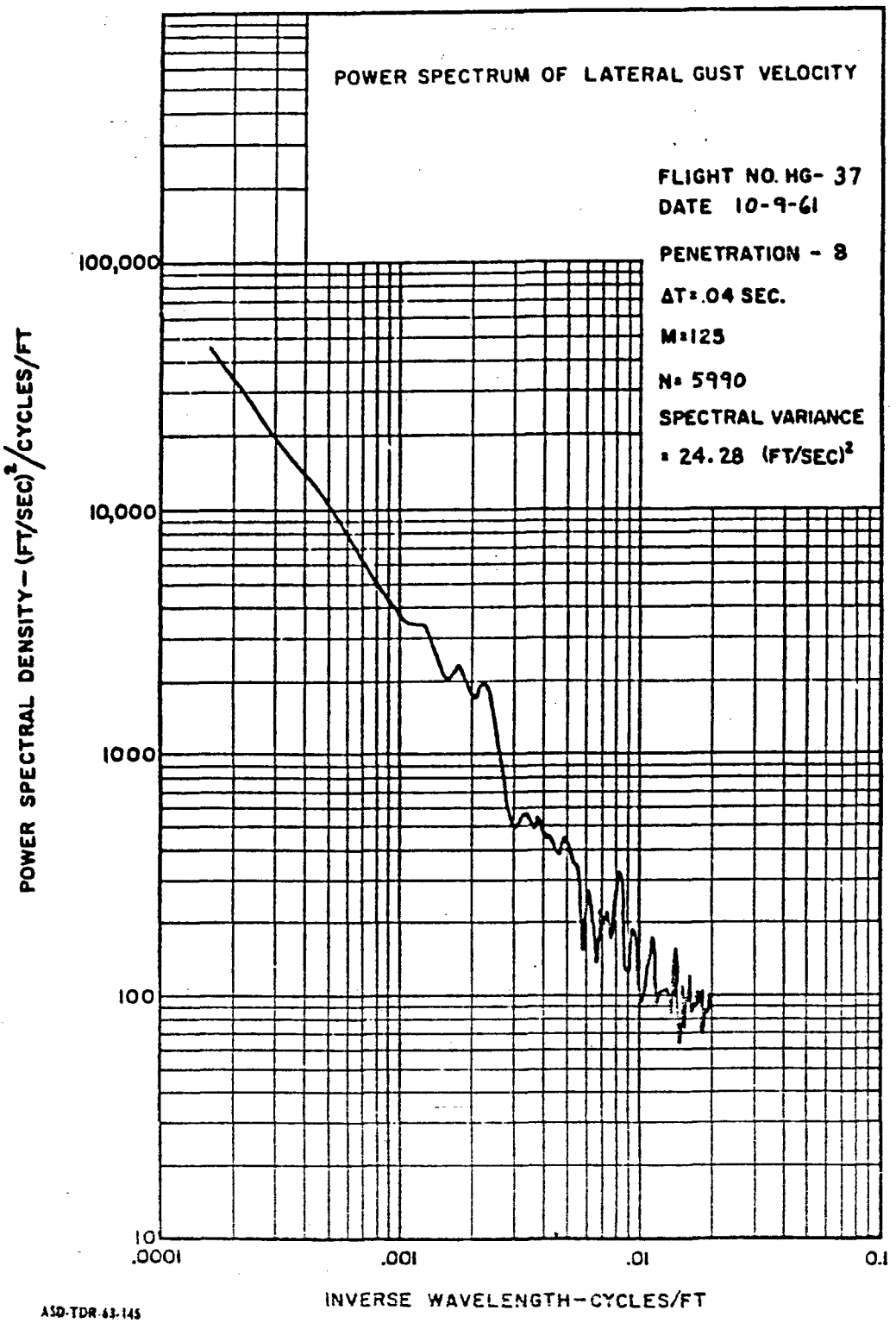

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3480
SPECTRAL VARIANCE
= 37.95 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

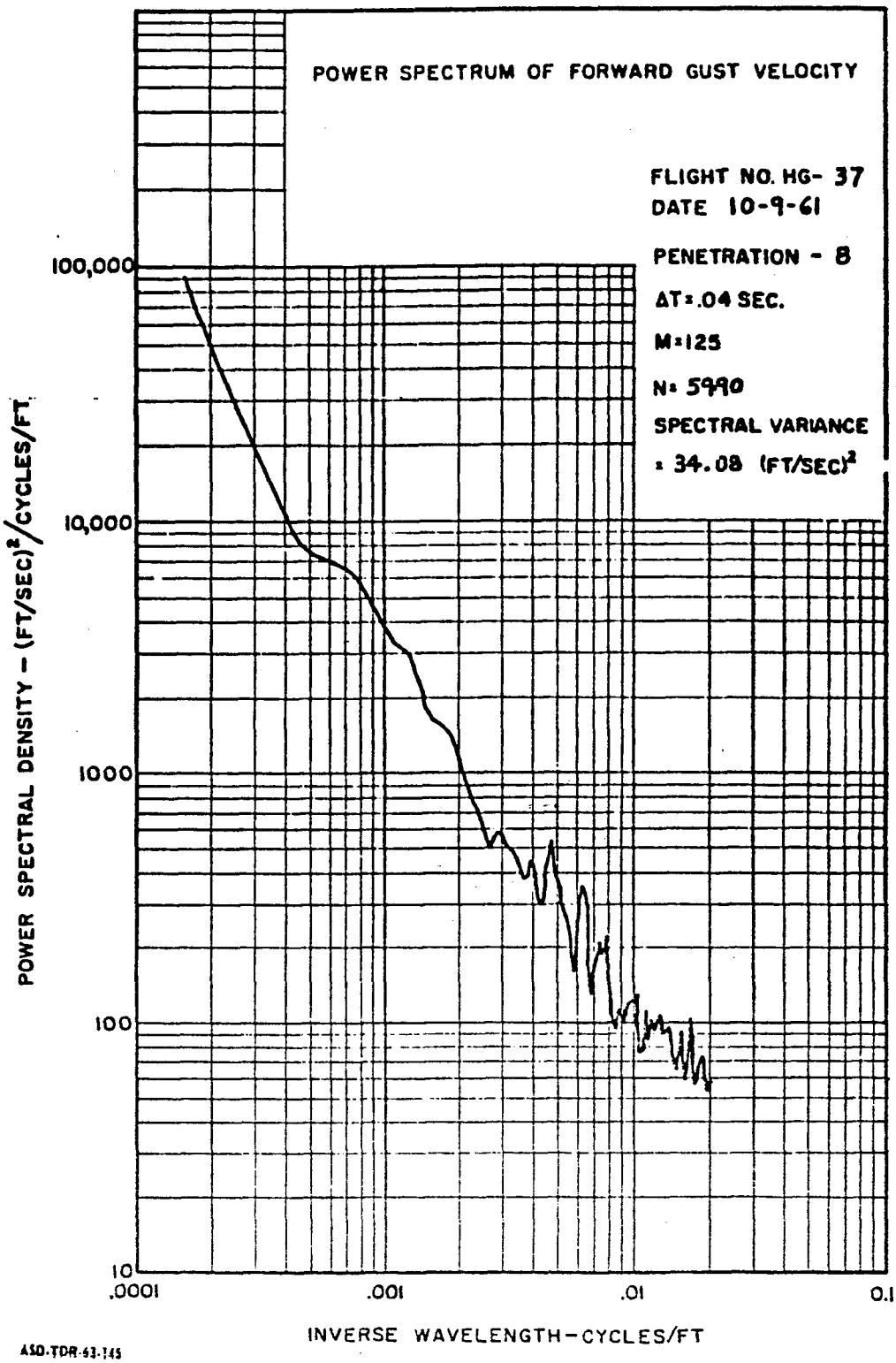

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG-37
DATE 10-9-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3480
SPECTRAL VARIANCE
= 50.61 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

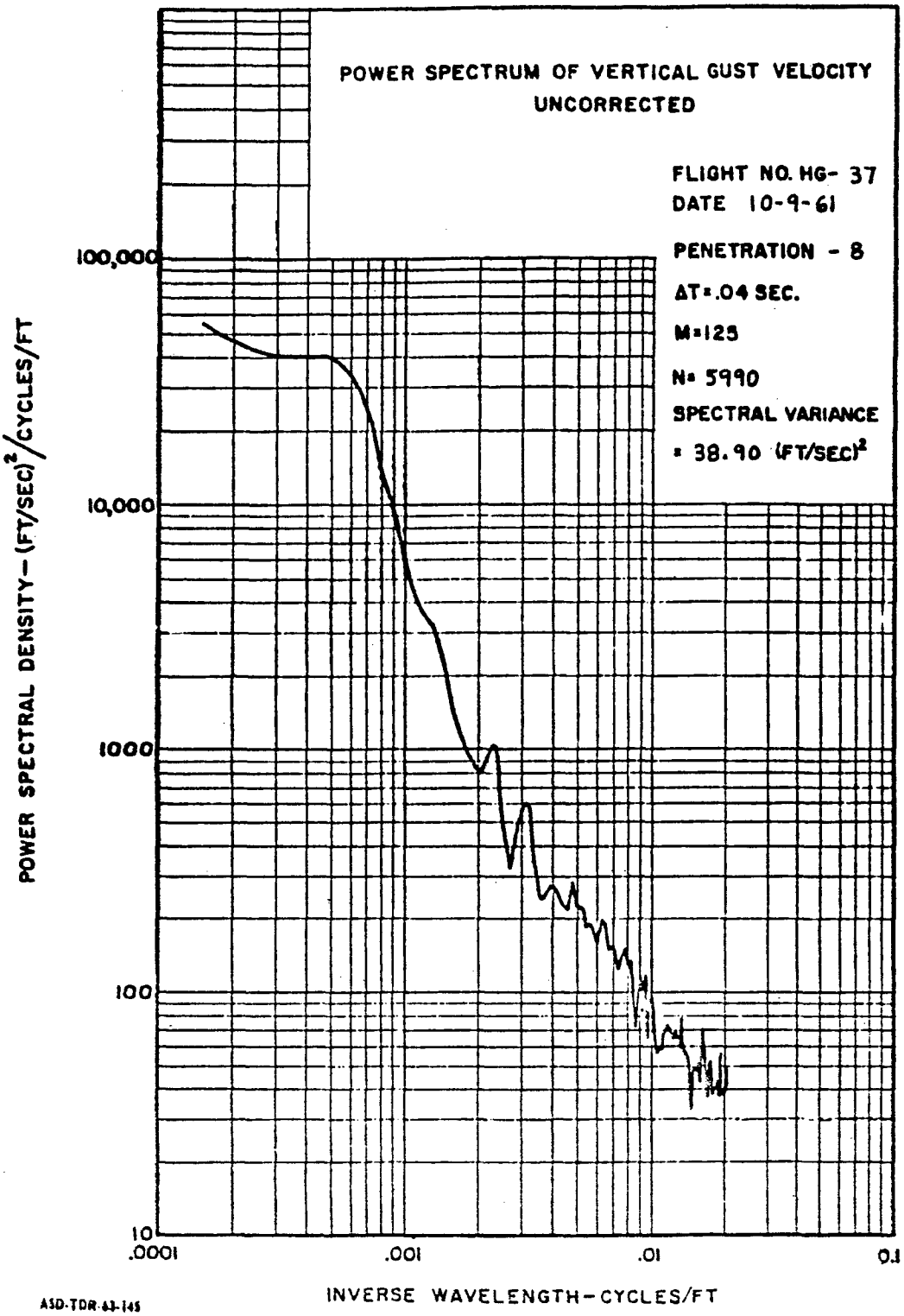

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3480
SPECTRAL VARIANCE
= 36.21 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

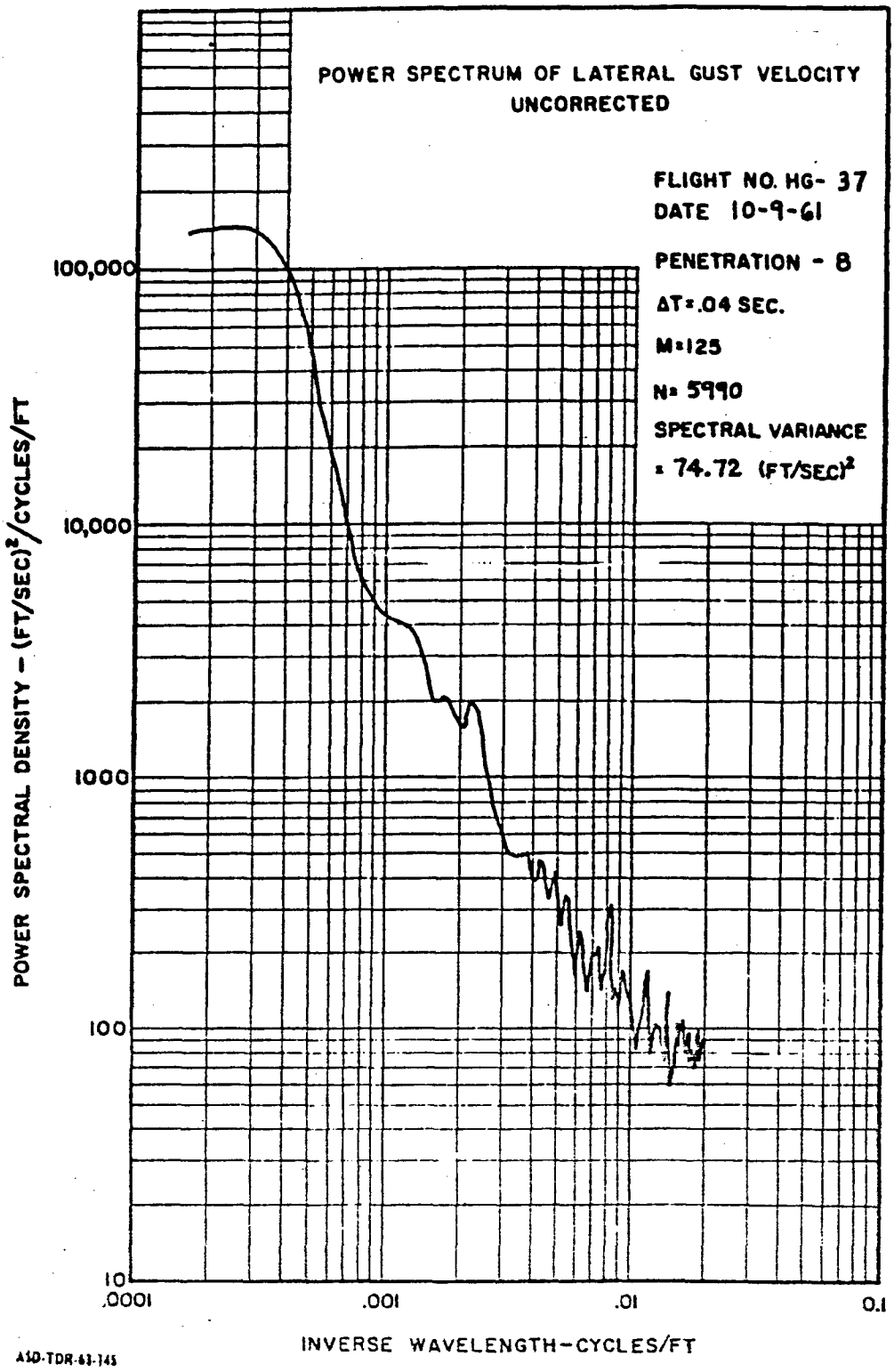

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 7
ΔT=.04 SEC.
M=125
N= 3480
SPECTRAL VARIANCE
= 110.80 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

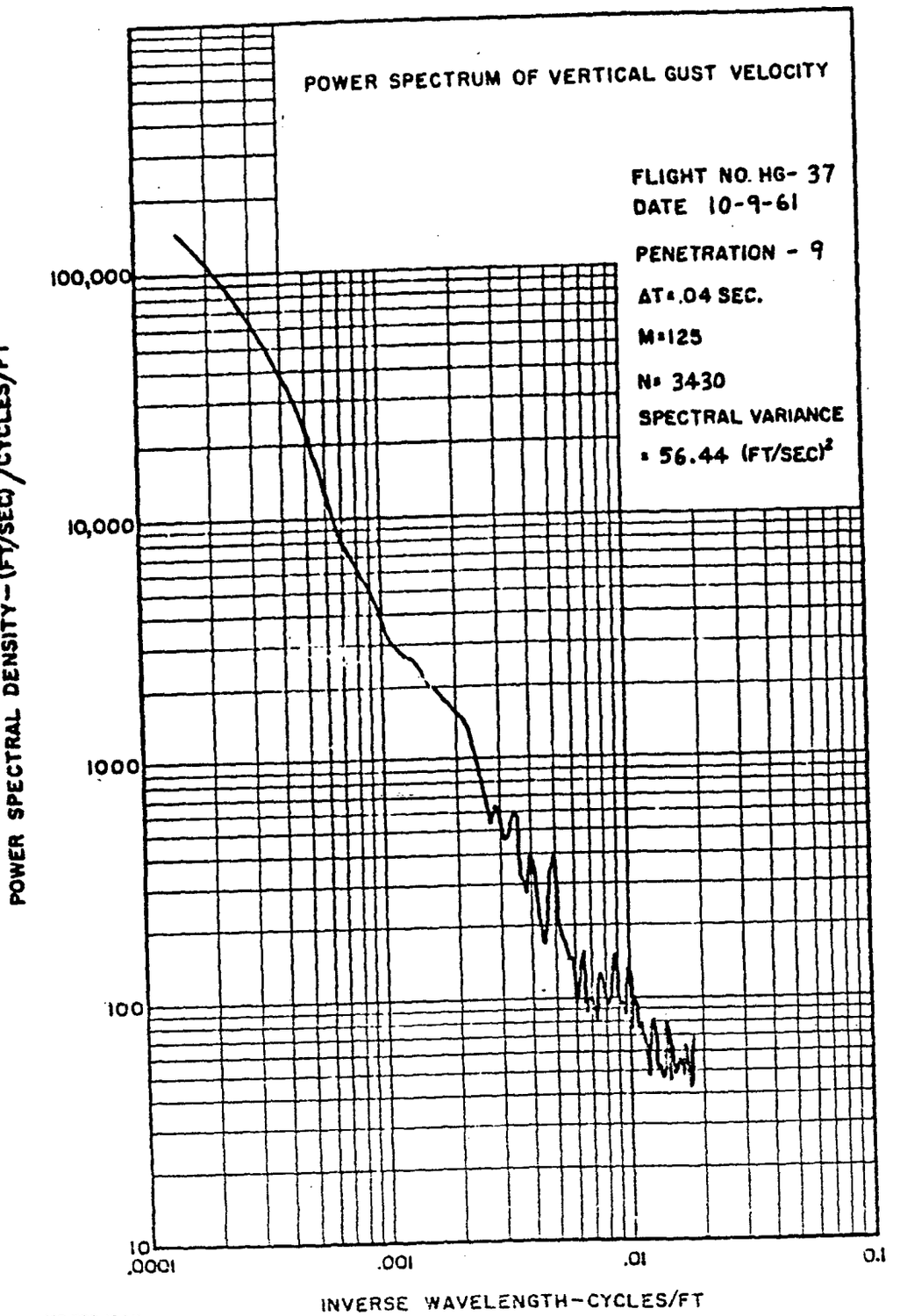

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 42.46 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

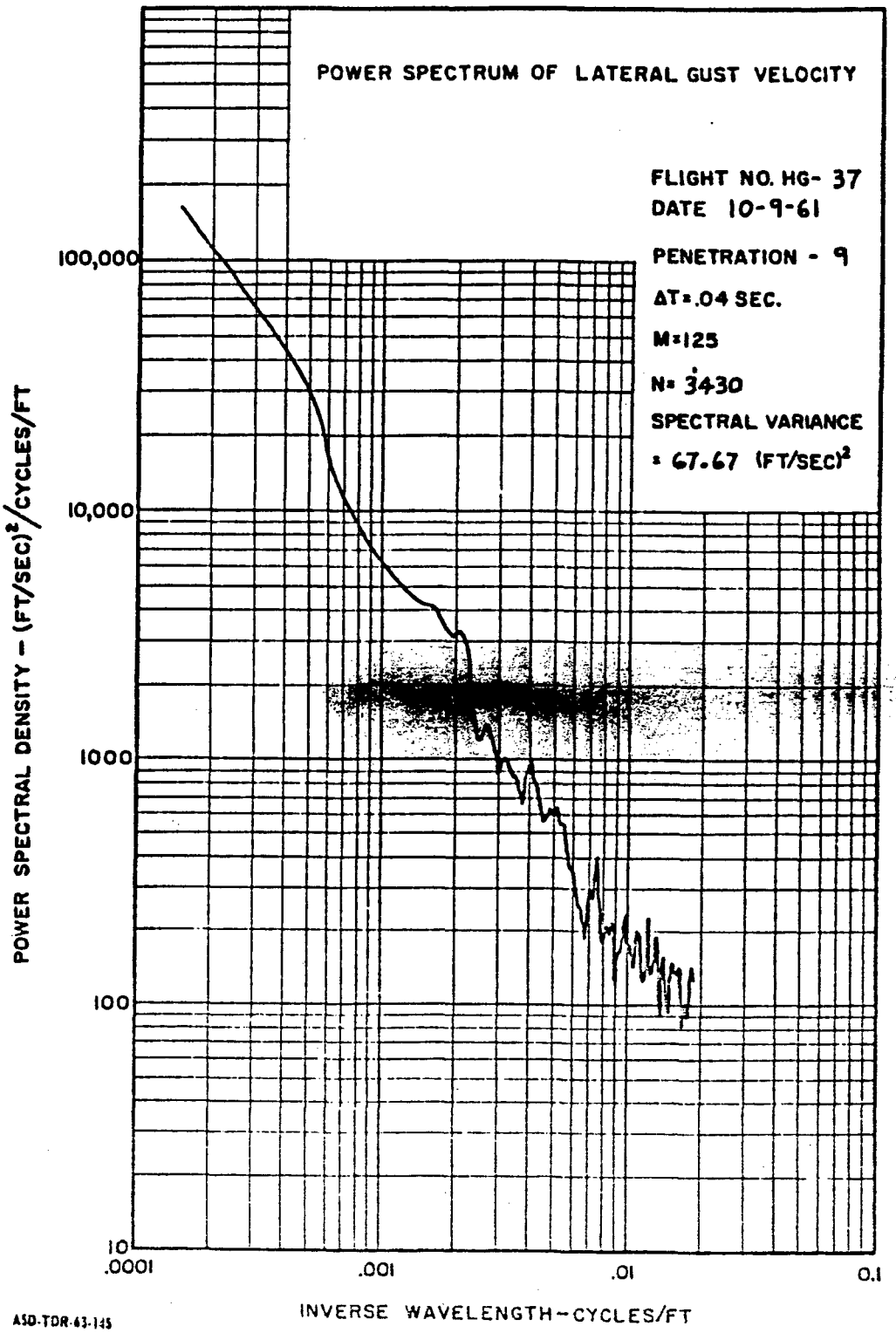

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 24.28 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

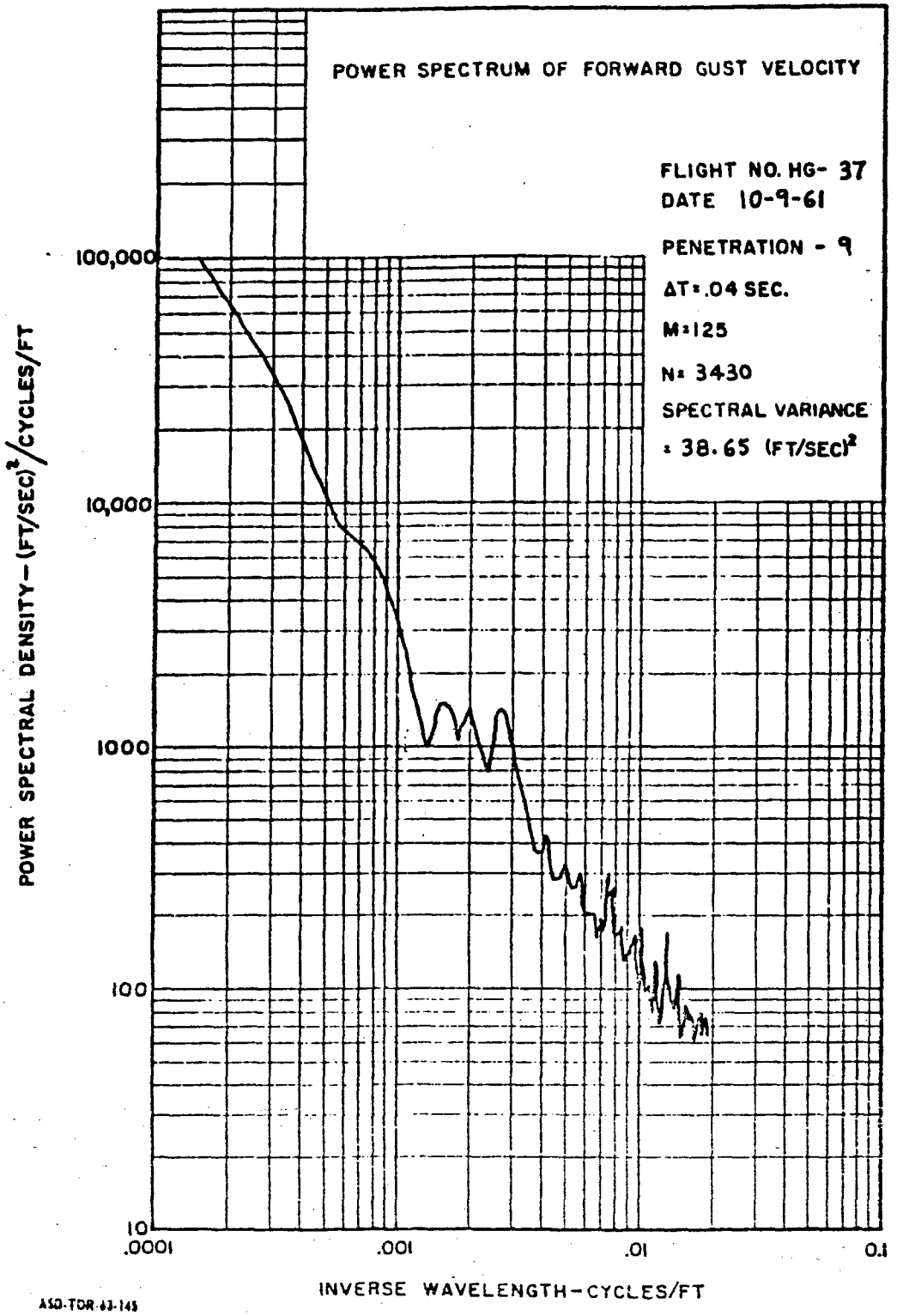

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 34.08 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

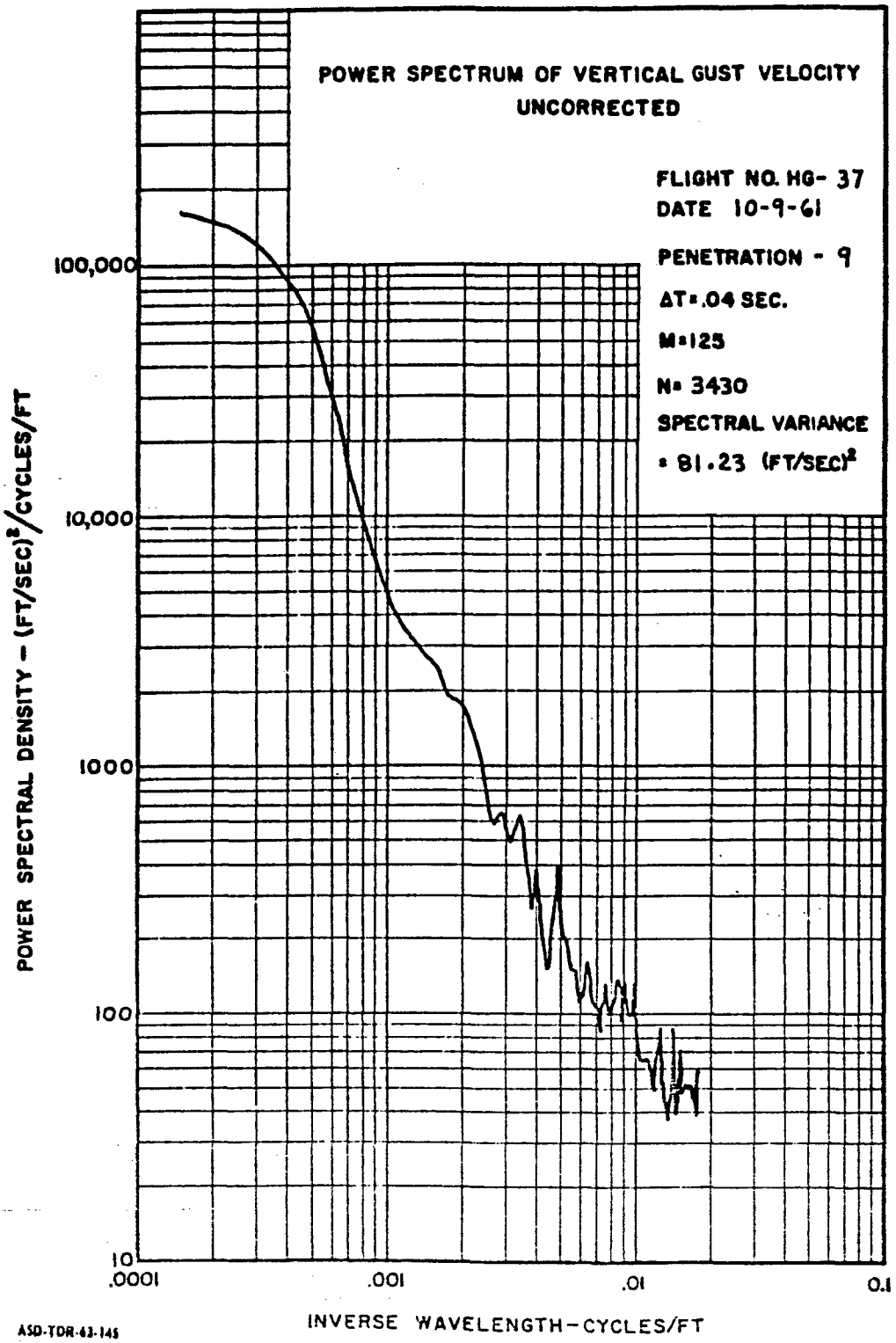

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 38.90 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

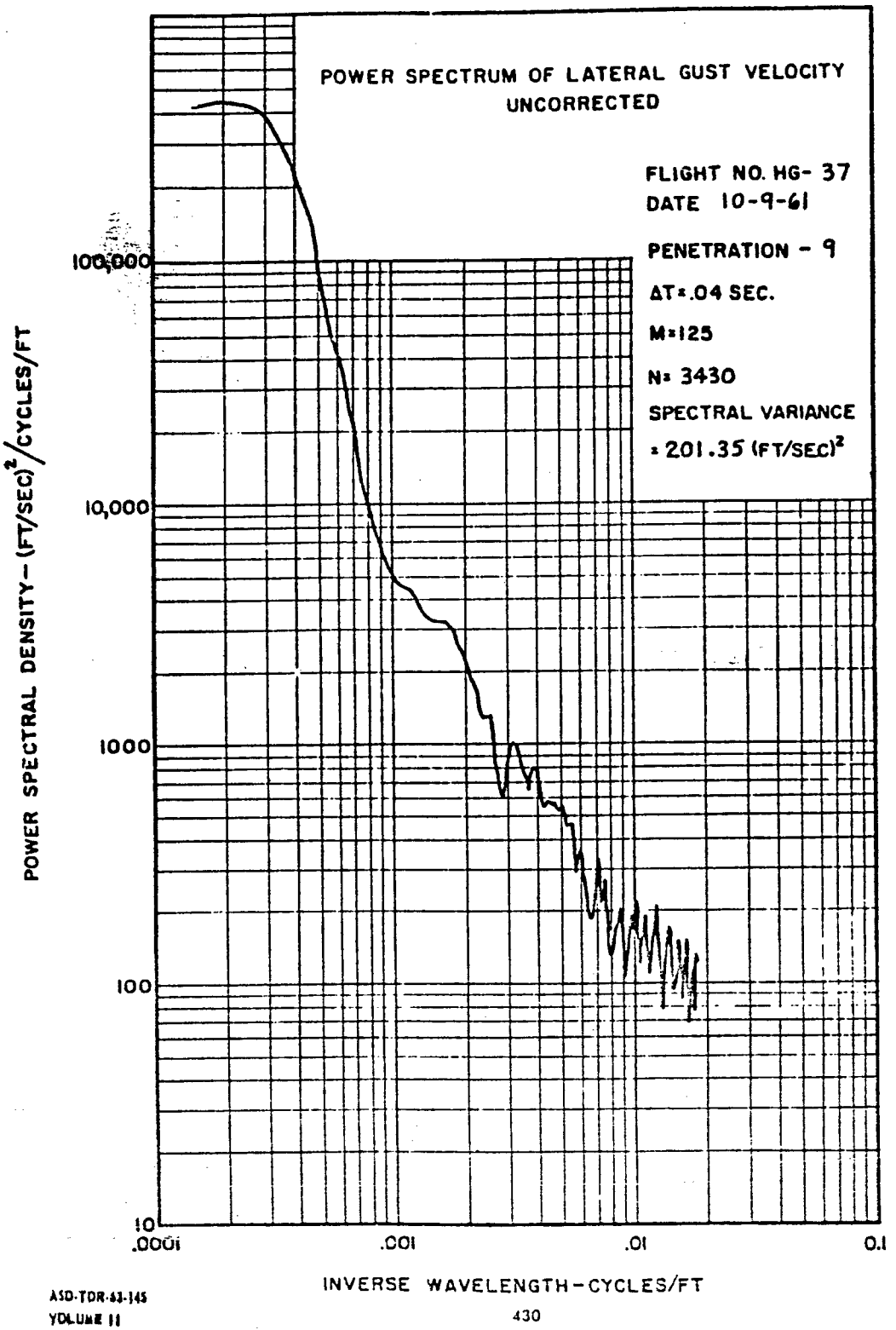

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 8
ΔT=.04 SEC.
M=125
N= 5990
SPECTRAL VARIANCE
= 74.72 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

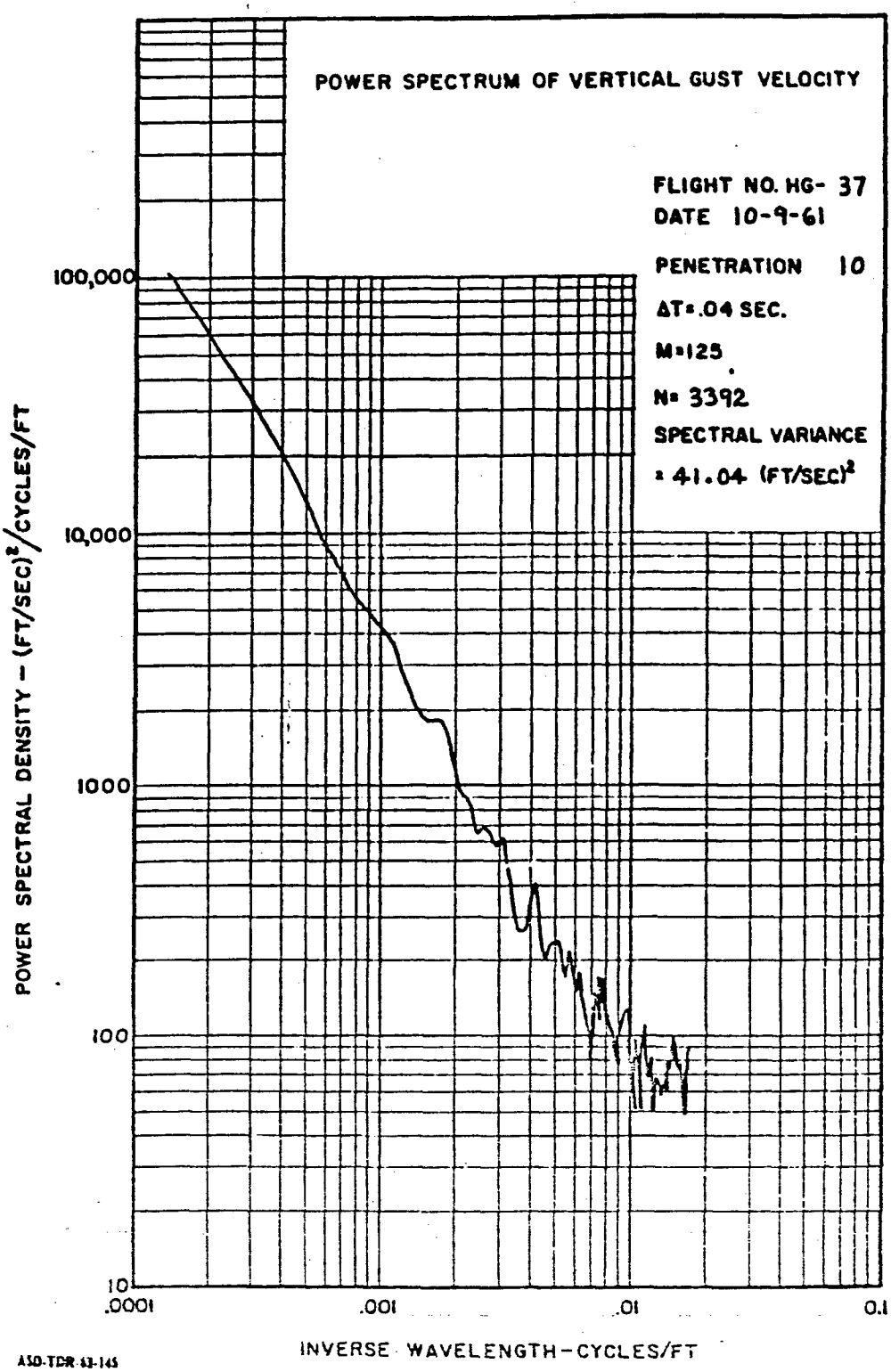

POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 3430
SPECTRAL VARIANCE
= 56.44 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

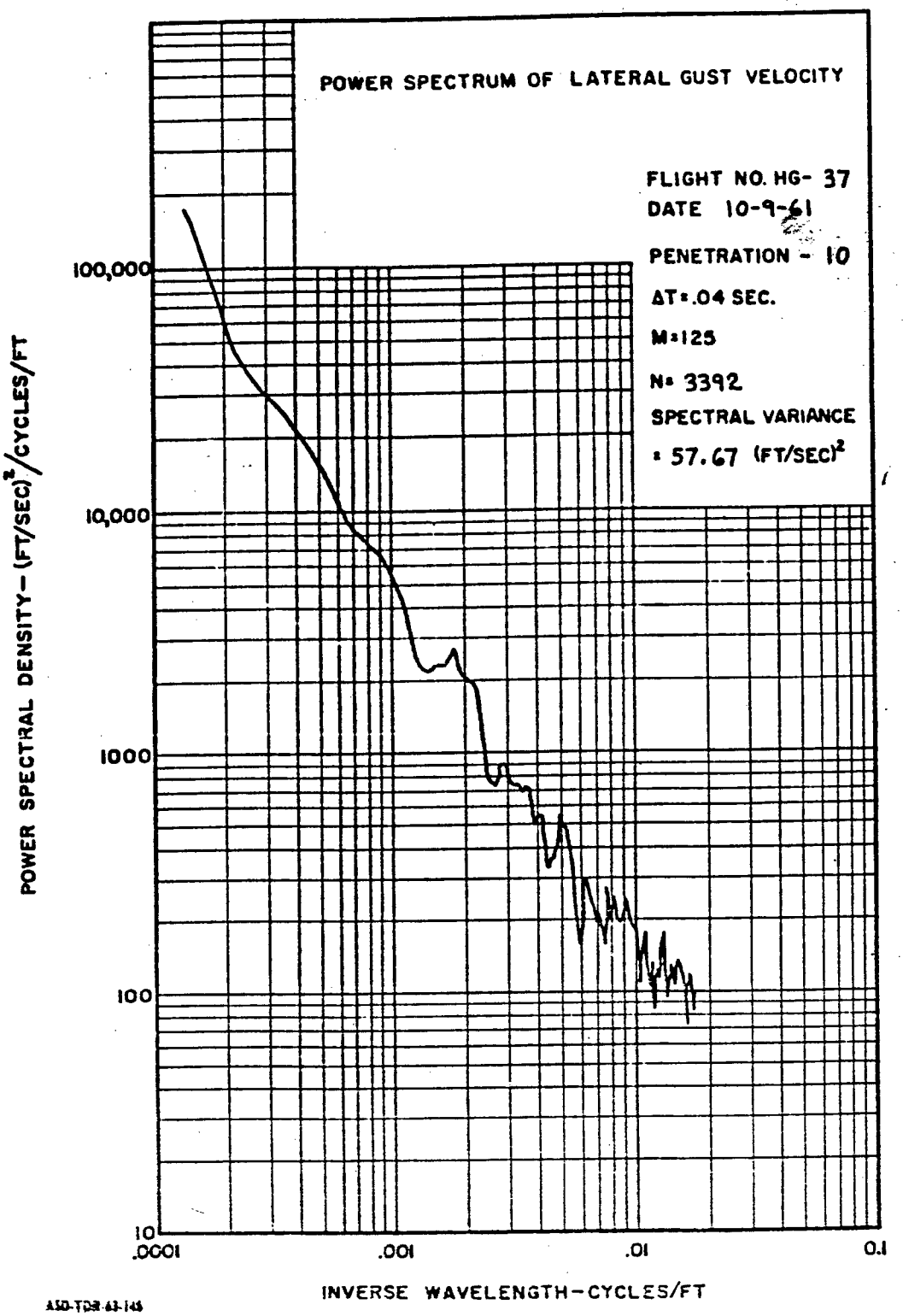

POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 3430
SPECTRAL VARIANCE
= 67.67 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH - CYCLES/FT

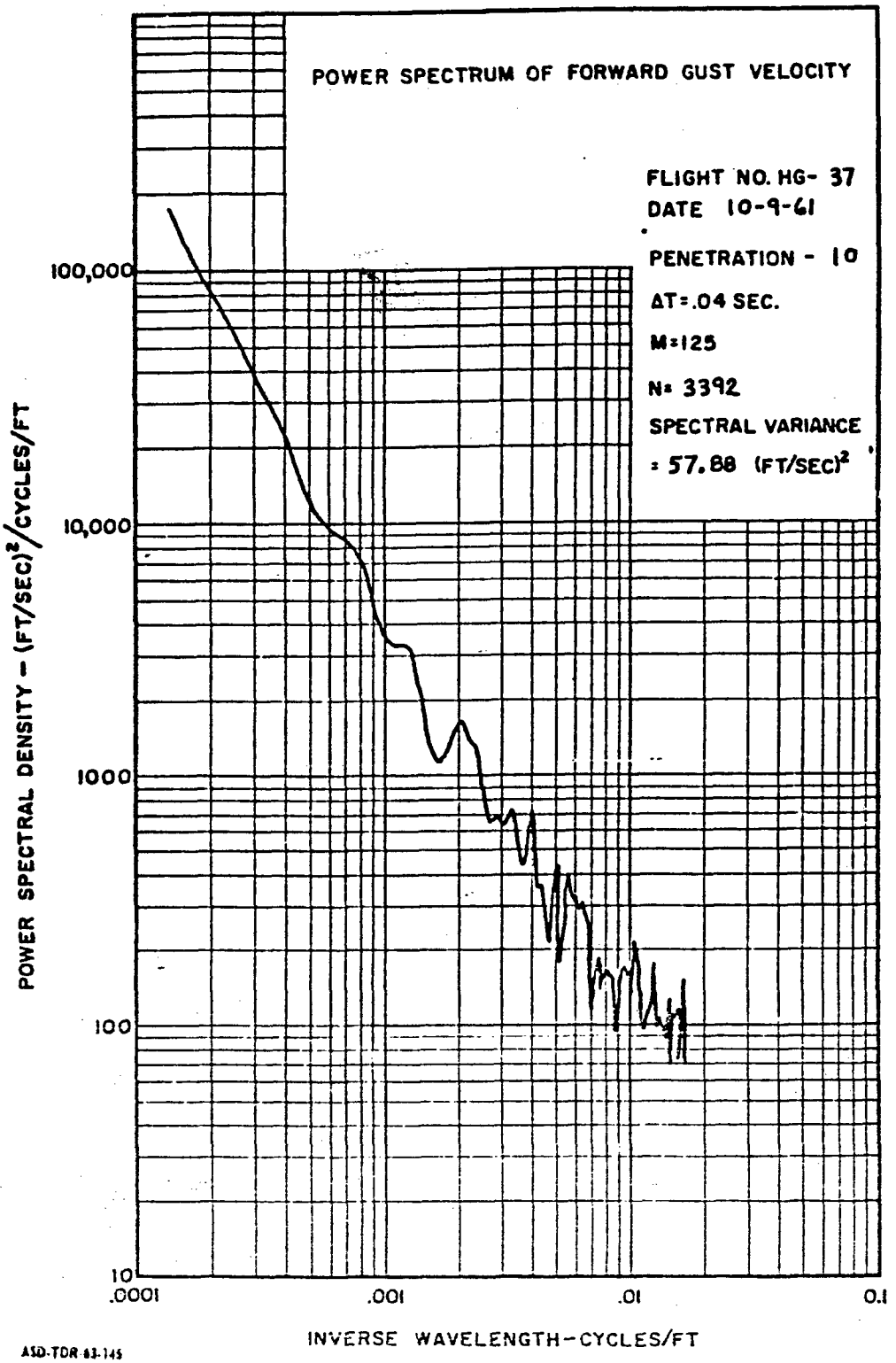

POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 3430
SPECTRAL VARIANCE
= 38.65 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT

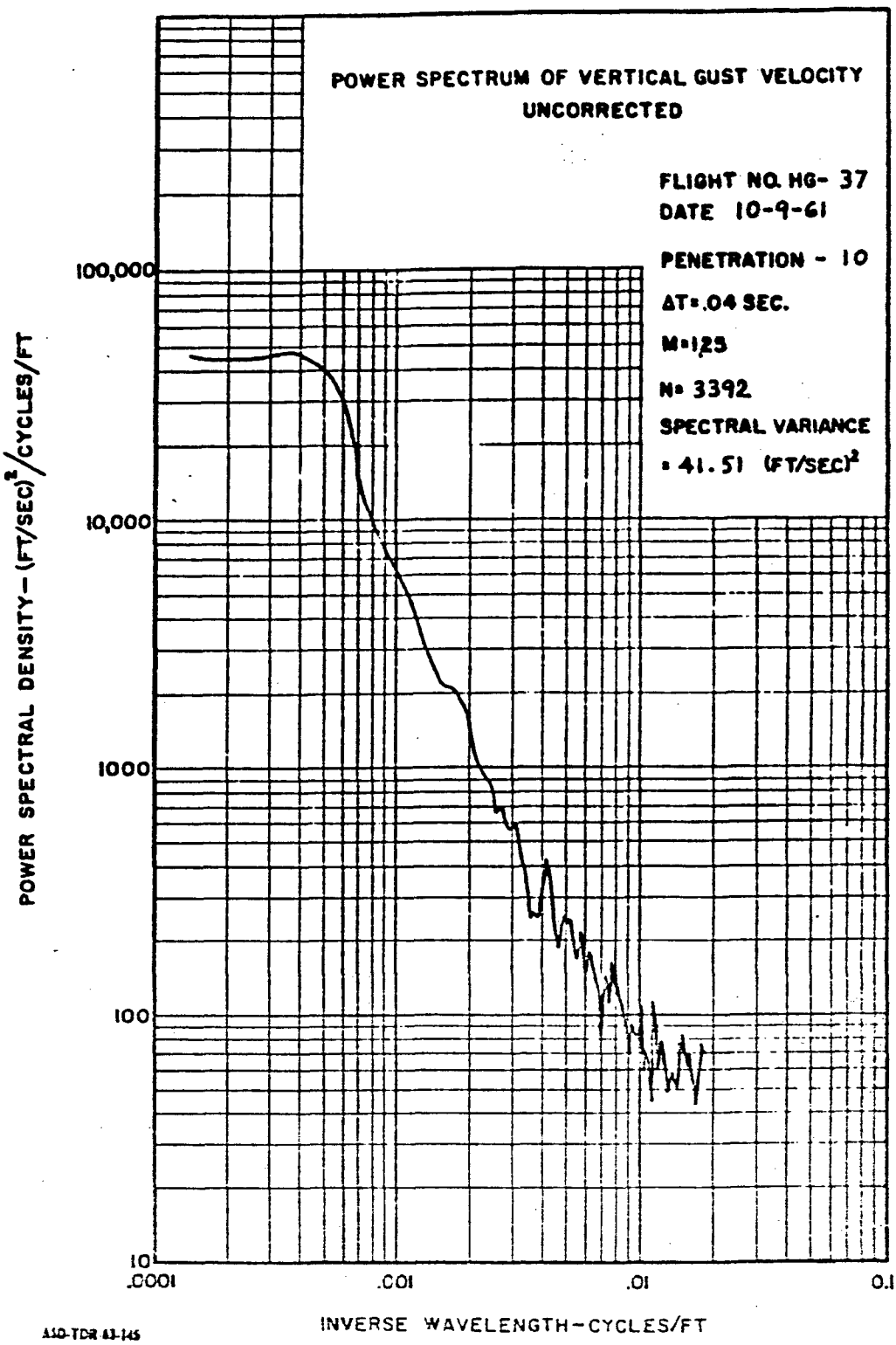

POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 3430
SPECTRAL VARIANCE
= 81.23 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH-CYCLES/FT

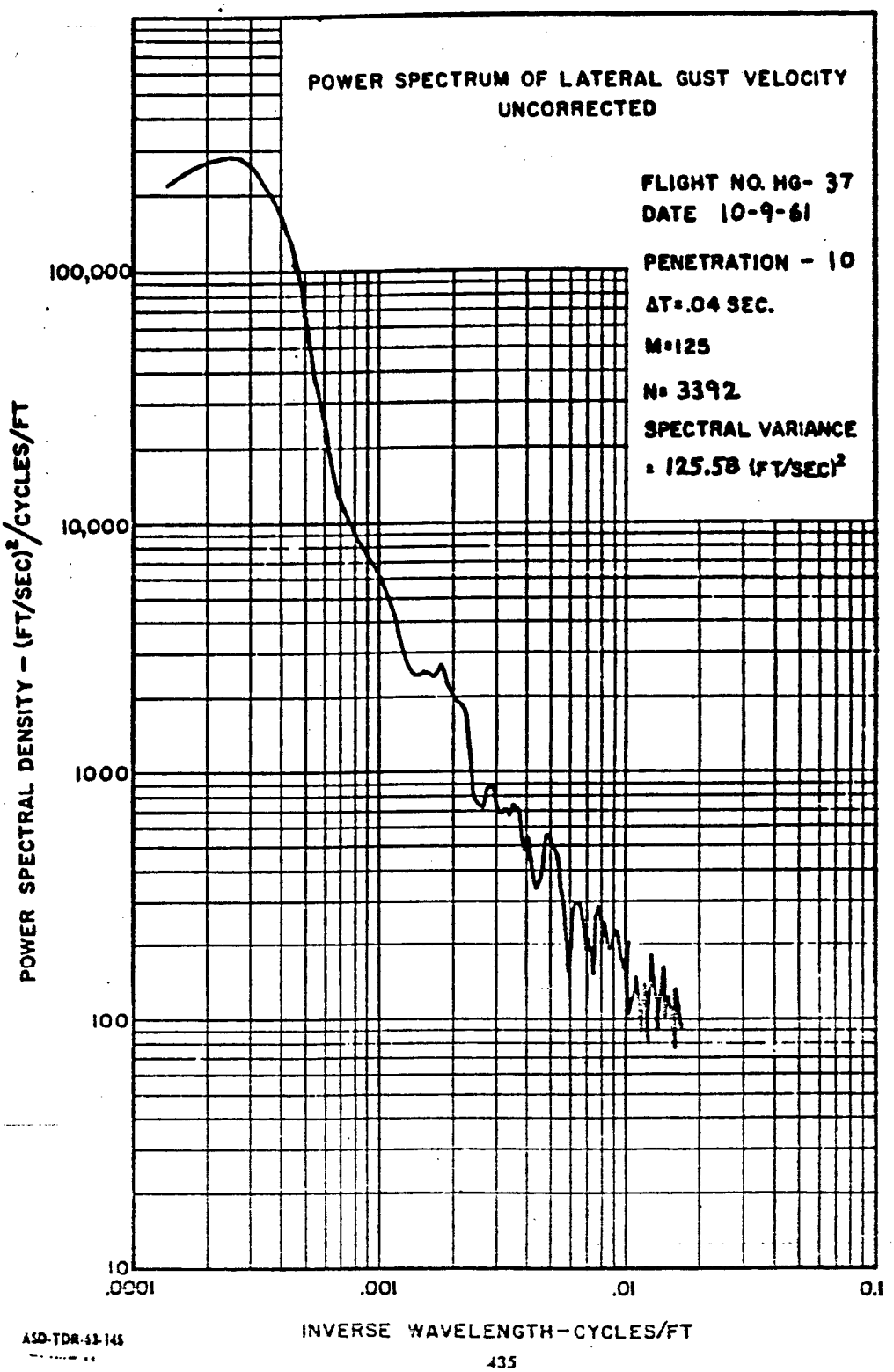

POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 9
ΔT=.04 SEC.
M=125
N= 3430
SPECTRAL VARIANCE
= 201.35 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT


POWER SPECTRUM OF VERTICAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION 10
ΔT=.04 SEC.
M=125
N= 3392
SPECTRAL VARIANCE
= 41.04 (FT/SEC)²
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
POWER SPECTRAL DENSITY – (FT/SEC)²/CYCLES/FT
INVERSE WAVELENGTH – CYCLES/FT


POWER SPECTRUM OF LATERAL GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 3392
SPECTRAL VARIANCE
= 57.67 (FT/SEC)²
POWER SPECTRAL DENSITY-(FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT


POWER SPECTRUM OF FORWARD GUST VELOCITY
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 3392
SPECTRAL VARIANCE
= 57.88 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT


POWER SPECTRUM OF VERTICAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 10
ΔT=.04 SEC.
M=123
N= 3392
SPECTRAL VARIANCE
= 41.51 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH - CYCLES/FT


POWER SPECTRUM OF LATERAL GUST VELOCITY
UNCORRECTED
FLIGHT NO. HG- 37
DATE 10-9-61
PENETRATION - 10
ΔT=.04 SEC.
M=125
N= 3392
SPECTRAL VARIANCE
= 125.58 (FT/SEC)²
POWER SPECTRAL DENSITY - (FT/SEC)²/CYCLES/FT
100,000
10,000
1000
100
10
.0001
.001
.01
0.1
INVERSE WAVELENGTH-CYCLES/FT

Aeronautical Systems Division, AF Flight Dynamics Laboratory, Wright-Patterson Air Force Base, Ohio.
Rpt Nr ASD-TDR-63-145, Vol II. NB-66B HIGH ALTITUDE GUST SURVEY; Power Spectra, Final Report, June 63, 443pages.

Unclassified Report

Volume II contains the power spectra plots for vertical, lateral and forward gust velocities corrected for airplane motion, followed by the power spectra plots of uncorrected vertical and uncorrected lateral gust velocities. The data presented were obtained from 109 high altitude storm penetrations in which the length of runs varied up to 240 seconds.

(over)

UNCLASSIFIED

1. Meteorological Data
2. Wind
3. Turbulence
4. Thunderstorms

I. AFSC Project 1447
II. AF 33(616)-7647
III. Douglas Aircraft Co, Aircraft Division, Long Beach, Calif.
IV. J. A. Strom
T.G. Weathermon
V. Aval fr OTS
VI. In ASTIA collection

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The data were sampled 25 times per second and the autocorrelation function was computed for 125 phase shifts.

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Aeronautical Systems Division, AF Flight Dynamics Laboratory, Wright-Patterson Air Force Base, Ohio.
Rpt Nr ASD-TDR-63-145, Vol II. NB-66B HIGH ALTITUDE GUST SURVEY; Power Spectra, Final Report, June 63, 443pages.

Unclassified Report

Volume II contains the power spectra plots for vertical, lateral and forward gust velocities corrected for airplane motion, followed by the power spectra plots of uncorrected vertical and uncorrected lateral gust velocities. The data presented were obtained from 109 high altitude storm penetrations in which the length of runs varied up to 240 seconds.

(over)

UNCLASSIFIED

1. Meteorological Data
2. Wind
3. Turbulence
4. Thunderstorms

I. AFSC Project 1447
II. AF 33(616)-7647
III. Douglas Aircraft Co, Aircraft Division, Long Beach, Calif.
IV. J. A. Strom
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